

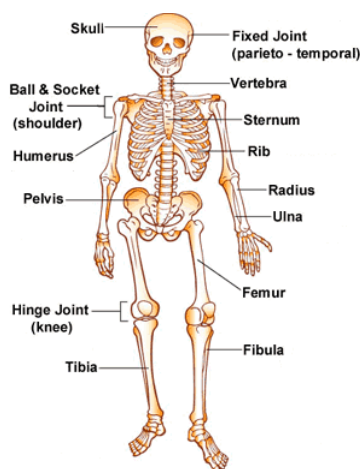
TOTTINGTON
HIGH SCHOOL



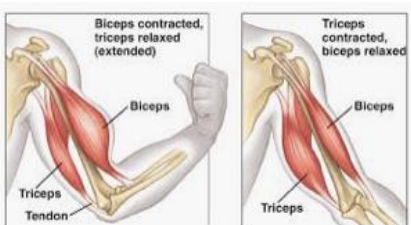
YEAR 8
KNOWLEDGE
ORGANISERS

The Musculoskeletal System

1. The musculoskeletal system is made up of bones, muscles and other connective tissue.
2. The skeleton is made up of bones. It has 4 important functions:
 - to **support** the body and give it shape
 - to **protect** the internal organs
 - to allow body **movements**
 - to produce **blood cells**

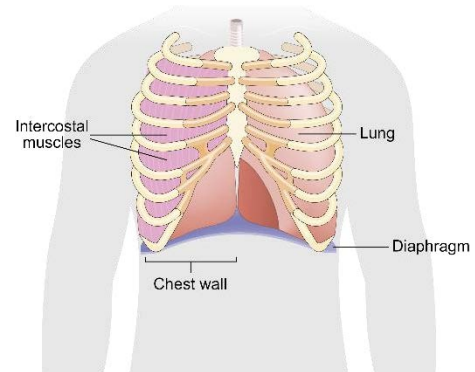


3. Red and white blood cells are produced in the bone marrow of flat bones such as the **pelvis**.
4. The skeleton and muscles interact to allow movement.
5. The function of muscles is to allow movement by **contracting**
6. **Antagonistic muscles** work in pairs.
7. An example of antagonistic muscles is the **biceps** and **triceps**.
8. **Joints** occur where two or more bones join together.



9. **Cartilage** in joints prevents bones rubbing together.
10. An **organ** is made up of different tissues that work together to perform a certain function.

11. We can use the **force applied** as a measurement of **muscle strength**.
12. A **Newtonmeter** can be used to measure the force exerted by a muscle.

Gas Exchange and Breathing

13. The **respiratory system** is made of the organs involved in gas exchange.
14. Breathing occurs through the action of muscles in the **ribcage** and **diaphragm**.
15. The lungs are surrounded by the **ribcage**.
16. The ribs have **intercostal muscles** between them. These can contract and relax to move the ribcage, changing the size of the **chest cavity**.
17. Below the lungs sits a layer of muscle called the **diaphragm**.
18. The **diaphragm** can contract and relax to change the size of the **chest cavity** where the lungs are.
19. Our respiratory system allows **air** to move into and out of the lungs through the nose and mouth.
20. Air enters the body through the **nose** and **mouth**. It then travels down the **windpipe (trachea)**, through a **bronchus** then a **bronchiole** into an **alveolus**. Oxygen diffuses into the blood at the alveoli.
21. The **trachea** is the rigid tube that connects the mouth and nose to the lungs.
22. The **bronchi (singular: bronchus)** are rigid tubes that allow air to pass into each of the two lungs. These divide into smaller branches called **bronchioles**.
23. The **alveoli** are microscopic air pockets in the lungs lined with cells that form a **very thin membrane**. These surround the ends of bronchioles.





24. The alveoli provide an efficient exchange surface because:
- The walls are thin, made of just one layer of **epithelial cells**
 - They have a **large surface area**: There are lots of them and they are spherical in shape
 - They have a **good blood supply**: There are lots of blood capillaries wrapped around them.
 - They are **moist**, which helps gases to diffuse across more easily.
25. **Gas exchange** is the transfer of gases between an organism and its environment
26. In gas exchange, oxygen and carbon dioxide move between alveoli and the blood.
27. The amount of oxygen required by body cells determines the **rate of breathing**.
28. Exercise, smoking and asthma can all affect the gas exchange system
29. Parts of the gas exchange system are adapted to their function.
30. The bell jar can be used to model the lungs. There are limitations to the bell jar model.
31. Changes in volume and pressure inside the chest move gases in and out of the lungs.
32. Asthma is a common condition where the airways (bronchi and bronchioles) become **narrower**.
33. Asthma can be treated by **inhaling** a drug (Ventolin) that widens the airways to allow more air to move in and out of the lungs.

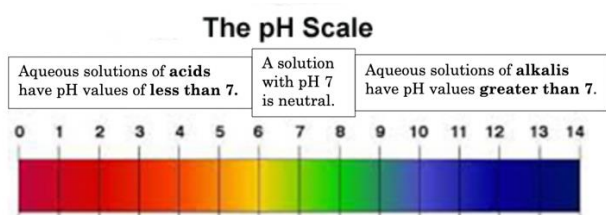
Drugs

34. A drug is any substance that has an **effect** on the body
35. A drug taken to treat an illness is called a **medicine**.
36. Recreational drugs are taken by people for **enjoyment**. They can often be **addictive**
37. Drugs are classified as illegal if they cause serious harm to the body.
38. **Stimulants** increase alertness and activity.
39. **Depressants** relax the nervous system and slow down reflexes.
40. **Opium-related** painkillers cause feelings of pleasure and trance state.
41. **Hallucinogens** cause 'out of body' experiences and mood swings



The pH Scale

1. Substances can be classified into **acidic**, **alkaline** and **neutral** solutions
2. The pH scale, from **0 to 14**, is a measure of the acidity or alkalinity of a solution
3. The pH scale can be measured using litmus, universal indicator or a pH probe.
4. A solution with **pH 7 is neutral**.
5. Aqueous solutions of **acids have pH values of less than 7**
6. Aqueous solutions of **alkalis have pH values greater than 7**
7. An aqueous solution is any solution in which the solvent is water



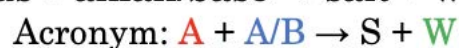
8. Strong acids have a pH from 0 to 3.
9. Weak acids have a pH of 4 to 6.
10. Strong alkalis have a pH from 11 to 14.
11. Weak alkalis have a pH from 8 to 10.
12. Strong acids and strong alkalis are both **corrosive**.
13. Weak acids and alkalis are less corrosive.
14. Many substances we use every day are acidic or alkaline.
15. Lemon juice is acidic.
16. Bleach (and many other cleaning agents) are alkaline.

27. **Acids** will turn universal indicator **red or orange**.
28. **Neutral** solutions will turn universal indicator **green**.
29. **Alkaline** solutions will turn universal indicator **blue or purple**.



Neutralisation

30. In neutralisation reactions an acid reacts with an alkali to form a salt and water.
31. Neutralisation forms a neutral (pH7) solution.
32. A salt is a metal compound made from acid.
33. A salt is formed when the hydrogen in an acid is replaced by a metal.



Indicators

17. Indicators will show the pH of the substance by a colour change.
18. Litmus indicator can show if a solution is acidic or alkaline.



19. Litmus indicator is red in an acidic solution.
20. Litmus indicator is blue in an alkaline solution.
21. Litmus indicator remains the same colour in a neutral solution.
22. If using litmus paper, blue litmus paper turns red in an acidic solution.
23. Red litmus paper turns blue in an alkaline solution.
24. To remember this, it might be helpful to memorise the rhyme
Blue to red, acid is said
Red to blue, acid untrue

**Acid****Alkali**

25. Universal indicator is sometimes called UI
26. Universal indicator can be used as a liquid solution or as paper strips to dip into a solution.

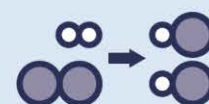
Metal Carbonates

34. Metal carbonates react with acids in neutralisation reactions to form a salt, water and carbon dioxide

Acids + metal carbonates → salt + water + carbon dioxide

Acronym: **A + C → S + W + C**

35. In an open system these products can escape, and the system is neutral
36. In a closed system carbon dioxide reacts with water to form carbonic acid, which makes the system acidic



Vocabulaire

(Page 26–27)

Point de départ (pages 8–9)

J'ai ...

une semaine de vacances.

deux semaines de vacances.

en janvier / février (etc.)

C'est pour Noël.

C'est pour Pâques.

C'est pour les grandes vacances.

Tu es où en vacances?

Je suis en vacances ...

au bord de la mer.

à la montagne.

à la campagne.

en colonie de vacances.

chez mes grands-parents.

C'est amusant.

C'est ennuyeux.

C'est intéressant.

C'est sympa.

C'est nul.

un peu

assez

très

complètement

I have ...

a week of holiday.

two weeks of holiday.

in January / February (etc.)

It's for Christmas.

It's for Easter.

It's for the summer holidays.

Where are you on holiday?

I am on holiday ...

at the seaside.

in the mountains.

in the countryside.

at a holiday camp.

at my grandparents' home.

It is fun.

It is boring.

It is interesting.

It is nice.

It is rubbish.

a bit

quite

very

completely

Unité 1 (pages 10–11) Qu'est-ce que tu as visité?

Qu'est-ce que tu as visité?

J'ai visité le château.

J'ai visité le lac.

J'ai visité le musée.

J'ai visité le parc.

J'ai visité le stade.

J'ai visité la cathédrale.

J'ai visité la mosquée.

J'ai visité la chocolaterie.

What did you visit?

I visited the castle.

I visited the lake.

I visited the museum.

I visited the park.

I visited the stadium.

I visited the cathedral.

I visited the mosque.

I visited the chocolate shop.

d'abord

ensuite

puis
après
finalement
C'était comment?

first of all
next
then
after(wards)
last of all
How was it?
What was it like?
It was fun.
It was cool.
It was great.
It was boring.
It was interesting.
It was nice.
It was modern.
It was rubbish.

C'était amusant.
C'était cool.
C'était génial.
C'était ennuyeux.
C'était intéressant.
C'était sympa.
C'était moderne.
C'était nul.

Unité 2 (pages 12–13) *Qu'est-ce que tu as fait pendant les vacances?*

Qu'est-ce que tu as fait pendant les vacances?

What did you do during the holidays?

Pendant les vacances ...

During the holidays ...

J'ai joué au tennis.

I played tennis.

J'ai joué au foot.

I played football.

J'ai mangé des glaces.

I ate ice creams.

J'ai mangé une pizza.

I ate a pizza.

J'ai écouté de la musique.

I listened to music.

J'ai acheté des baskets.

I bought some trainers.

J'ai acheté un tee-shirt.

I bought a tee-shirt.

J'ai acheté des BD.

I bought some comics.

J'ai regardé des clips vidéo.

I watched video clips.

J'ai regardé un film à la télé.

I watched a film on TV.

J'ai nagé dans la mer.

I swam in the sea.

J'ai retrouvé Léo.

I met up with Léo.

J'ai traîné au lit.

I hung around in bed.

J'ai dormi.

I slept.

Unité 3 (pages 14–15) *Qu'est-ce que tu as fait?*

J'ai visité un parc d'attractions.

J'ai bu un coca.

J'ai vu un spectacle.
J'ai vu mes personnages préférés.
J'ai fait une balade en bateau.
J'ai fait les manèges.
J'ai pris des photos.
Je n'ai pas mangé de glaces.
Je n'ai pas acheté de souvenirs.

*I visited a theme park.
I drank a cola.
I saw a show.
I saw my favourite characters.
I went on a boat ride.
I went on the rides.
I took photos.
I didn't eat any ice creams.
I didn't buy any souvenirs.*

Unité 4 (pages 16–17) *Tu es allé(e) où?*

Tu es allé(e) où en vacances?
Je suis allé(e) en Espagne.
Je suis allé(e) en Grèce.
Je suis allé(e) au Maroc.
Je suis allé(e) aux États-Unis.
Avec qui?
Avec mon frère.
Avec ma famille.
Avec mes parents.
Avec mes amis.
Tu as voyagé comment?
J'ai voyagé en avion.
J'ai voyagé en bateau.
J'ai voyagé en car.
J'ai voyagé en train.
J'ai voyagé en voiture.

*Where did you go on holiday?
I went to Spain.
I went to Greece.
I went to Morocco.
I went to the USA.
Who with?
With my brother.
With my family.
With my parents.
With my friends.
How did you travel?
I travelled by plane.
I travelled by boat.
I travelled by coach.
I travelled by train.
I travelled by car.*

Vocabulaire

(Page 50–51)

Point de départ (pages 30–31)

le premier avril
le deux / trois / dix avril
Quelle est ta fête préférée?
J'adore ...
J'aime ...
Je préfère ...
Je n'aime pas ...
Je déteste ...
Noël.
Pâques.
le 14 juillet.
le Nouvel An.
la Chandeleur.
la Saint-Valentin.
l'Aïd.
mon anniversaire.
manger du chocolat.
acheter des cadeaux.
danser.
faire une soirée pyjama.
aller chez mes cousins.
C'est amusant.
C'est commercial.
C'est nul.
C'est sympa.

the first of April
the second / third / tenth of April
What's your favourite festival?
I love ...
I like ...
I prefer ...
I don't like ...
I hate ...
Christmas.
Easter.
Bastille Day.
New Year.
Pancake Day.
Valentine's Day.
Eid.
my birthday.
to eat / eating chocolate.
to buy / buying presents.
to dance / dancing.
to have / having a sleepover.
to go / going to my cousins' house.
It is fun.
It is commercialised.
It is rubbish.
It is nice.

Unité 1 (pages 32–33) C'est carnaval!

Ma fête préférée, c'est le carnaval.
Je retrouve mes copains.
Je porte un masque et un déguisement.
Je regarde la parade.

J'écoute la musique.
I listen to the music.

My favourite festival is carnival.
I meet my friends.
I wear a mask and a costume.

I watch the parade.

Je mange une crêpe.
Je partage des photos.

Sur la photo, il y a un homme.
 Sur la photo, il y a un garçon.
 Sur la photo, il y a une femme.
 Sur la photo, il y a une fille.
 Il / Elle est dans une parade.
 Il / Elle est dans un parc.
 Il / Elle danse.
 Il / Elle regarde la parade.
 Il / Elle mange une glace.
 Il / Elle chante.
 Il / Elle porte un déguisement.
 Il / Elle porte un masque.
 Je pense qu' ...
 il fait beau.
 il fait mauvais.
 il fait chaud.
 il fait froid.

I eat a pancake
I share photos.
In the photo there is a man.
In the photo there is a boy.
In the photo there is a woman.
In the photo there is a girl.
He / She is in a parade.
He / She is in a park.
He/ She is dancing.
He / She is watching the parade.
He / She is eating an ice cream.
He / She is singing.
He / She is wearing a costume.
He / She is wearing a mask.
I think that ...
 the weather is fine.
 the weather is bad.
 it is hot.
 it is cold.

Unité 2 (pages 34–35) La fête de la musique

J'attends la fête avec impatience.
 Je vends des disques vinyles.
 Je finis à midi.
 Je choisis un groupe de rock.
 J'écoute un rappeur.
 Je préfère la fanfare.
 Ma mère chante dans la chorale.
 Mon frère choisit un groupe folk.
 le matin
 l'après-midi
 le soir

I am looking forward to the festival.
I sell records.
I finish at lunchtime.
I choose a rock group.
I listen to a rapper.
I prefer the brass band
My mother sings in the choir.
My brother chooses a folk group.
(in) the morning
(in) the afternoon
(in) the evening

Unité 3 (pages 36–37) Et avec ça?

le fromage	<i>cheese</i>
le jambon	<i>ham</i>
un chou-fleur	<i>a cauliflower</i>
un haricot vert	<i>a green bean</i>
un melon	<i>a melon</i>
un œuf	<i>an egg</i>
un oignon	<i>an onion</i>
une banane	<i>a banana</i>
une pomme	<i>an apple</i>
une pomme de terre	<i>a potato</i>
une tomate	<i>a tomato</i>
un kilo de ...	<i>a kilo of ...</i>
un demi-kilo de ...	<i>half a kilo of ...</i>
une tranche de ...	<i>a slice of ...</i>
Vous désirez?	<i>What would you like?</i>
Je voudrais des tomates, s'il vous plaît.	<i>I'd like some tomatoes, please.</i>
Et avec ça?	<i>Anything else?</i>
C'est tout?	<i>Is that all?</i>
Ça fait combien?	<i>How much is it?</i>
Ça fait 3€50.	<i>That's 3 euros fifty.</i>
Voilà.	<i>Here you are.</i>
Merci, bonne journée!	<i>Thanks, have a nice day!</i>

Unité 4 (pages 38–39) Qu'est-ce que tu vas manger?

Qu'est-ce que tu vas manger pour la fête?	<i>What are you going to eat for the festival?</i>
Je vais manger ...	<i>I am going to eat ...</i>
une salade niçoise.	<i>a tuna and olive salad.</i>
une tarte flambée.	<i>a pizza-like tart.</i>
un couscous aux légumes.	<i>a vegetable couscous.</i>
une crêpe	<i>a pancake</i>
des moules-frites	<i>mussels and chips</i>
une quiche lorraine	<i>a bacon quiche</i>
du thon	<i>tuna</i>
du fromage blanc	<i>soft white cheese</i>
de la pâte	<i>pastry</i>
des olives	<i>des pois chiches</i>

des carottes

C'est comment?

C'est très bon.

C'est délicieux.

C'est savoureux.

C'est un plat typique ...

C'est une spécialité ...

du nord de la France.

du sud de la France.

de l'est de la France.

de l'ouest de la France.

olives

chickpeas

carrots

What is it like?

It is very good.

It is delicious.

It is tasty.

It's a typical dish ...

It's a speciality ...

of the north of France.

of the south of France.

of the east of France.

of the west of France.

Unité 5 (pages 40–41) *Le marché de Noël*

Qu'est-ce que tu vas faire?

Je vais ...

visiter le marché de Noël.

acheter un cadeau.

admirer les maisons illuminées.

écouter des chorales.

manger une tarte flambée.

boire un jus de pomme chaud.

What are you going to do?

I am going ...

to visit the Christmas market.

to buy a present.

to admire the illuminated houses.

to listen to some choirs.

to eat a pizza-like tart.

to drink a hot apple juice.

Vocabulaire

(Page 74–75)

Point de départ (pages 54–55)

Qu'est-ce que tu aimes à la télé?

J'adore ...

J'aime ...

Je n'aime pas ...

Je déteste ...

les comédies.

les dessins animés.

les feuilletons.

les infos.

les jeux (télévisés).

les émissions de cuisine.

les émissions de musique.

les émissions de sport.

les émissions de
science-fiction.

les émissions de
télé-réalité.

Mon émission préférée,
c'est ...

Qui est ton acteur préféré?

Qui est ton actrice préférée?

J'aime (Emma Stone)

Je n'aime pas (Idris Elba)

parce qu'il est ...

parce qu'elle est ...

parce qu'il n'est pas ...

parce qu'elle n'est pas ...

intelligent(e)

drôle

modeste

généreux/généreuse

beau/belle

arrogant(e)

sérieux/sérieuse

What do you like on TV?

I love ...

I like ...

I don't like ...

I hate ...

comedies.

cartoons.

soaps.

the news.

gameshows.

cooking programmes.

music programmes.

sports programmes.

science fiction

programmes.

reality programmes.

*My favourite programme
is ...*

Who is your favourite actor?

Who is your favourite actress?

I like (Emma Stone)

I don't like (Idris Elba)

because he is ...

because she is ...

because he isn't ...

because she isn't ...

intelligent

funny

modest

generous

good-looking

arrogant

serious

un peu

assez

très

trop

a bit

quite

very

too

Unité 1 (pages 56–57) *Ma vie numérique*

Quand est-ce que tu regardes la télé?

le matin

le soir

le weekend

Où est-ce que tu regardes la télé?

à la maison

dans le bus

chez mes amis

Avec qui est-ce que tu

regardes la télé?

seul(e)

avec ma famille

avec mes copains

Qu'est-ce que tu regardes à la télé?

Je regarde (les feuilletons).

Comment est-ce que tu

regardes la télé?

sur ma tablette

à la demande, sur Netflix

J'écoute de la musique en streaming.

Je télécharge des chansons.

Je crée des playlists.

J'écoute la musique de ...

Je joue sur ma Xbox.

Je joue contre mon frère.

Mon jeu préféré, c'est ...

When do you watch TV?

in the morning

in the evening

at the weekend

Where do you watch TV?

at home

on the bus

at my friends' house

Who do you watch TV with?

alone

with my family

with my friends

What do you watch on TV?

I watch (soaps).

How do you watch TV?

on my tablet

on demand, on Netflix

I stream music.

I download songs.

I create playlists.

I listen to the music of ...

I play on my Xbox.

I play against my brother.

My favourite game is ...

Unité 2 (pages 58–59) On va au ciné?

Je vais aller au cinéma ce soir.

I'm going to the cinema this evening.

Je vais voir ...

I'm going to see ...

une comédie.

a comedy.

un film d'animation.

an animated film.

un film d'action.

an action film.

un film d'horreur.

a horror film.

un film de science-fiction.

a sci-fi film.

un film de super-héros.

a superhero film.

Tu viens?

Are you coming?

Oui, je veux bien, merci.

Yes, I'd like to, thanks.

Désolé(e). Je ne peux pas ce soir.

Sorry. I can't this evening.

Rendez-vous à quelle heure?

When shall we meet?

Rendez-vous (chez moi) à (19h00).

Let's meet at (my house) at (7 p.m.).

Unité 3 (pages 60–61) Quels sont tes loisirs?

J'ai un smartphone.

I have a smartphone.

Je surfe.

I surf.

Je blogue.

I blog.

Je tchatte.

I chat.

Je fais des achats en ligne.

I do online shopping.

Je joue au foot.

I play football.

Je fais du vélo.

I go cycling.

Je lis des BD.

I read comic books.

Je n'ai pas de portable.

I don't have a phone.

Je n'ai pas d'ordinateur.

I don't have a computer.

Je ne fais pas de sport.

I don't do any sport.

Je ne regarde jamais la télé.

I never watch TV.

Je ne joue jamais à des jeux vidéo.

I never play video games.

Je ne lis rien.

I don't read anything.

Je ne fais rien en ligne.

I don't do anything online.

Sur la photo, il y a 2 filles et

In the photo, there are 2 girls

2 garçons.

and 2 boys.

À droite ... / À gauche ...

On the right ... / On the left ...

Il regarde son portable.

He is looking at his phone.

Elle joue à des jeux vidéo.

She is playing video games.

Elle écoute de la musique
sur sa tablette.
avec un copain / une copine

*She is listening to music on her
tablet.
with a friend*

Unité 4 (pages 62–63) *Tu as fait des achats?*

Je suis allé(e) au centre commercial.

I went to the shopping centre.

J'ai fait les magasins.

I went shopping.

J'ai fait des achats.

J'ai acheté un tee-shirt.

I bought a tee-shirt.

J'ai mangé un sandwich.

I ate a sandwich.

J'ai bu une limonade.

I drank a lemonade.

J'ai fait une balade.

I went for a walk.

J'ai fait une promenade.

Je suis allé(e) au cinéma.

I went to the cinema.

J'ai vu un film comique.

I saw a comedy.

J'ai vu une comédie.

Unité 5 (pages 64–65) *Ça, c'est la question!*

Quels sont tes loisirs?

What are your hobbies?

Je joue au basket.

I play basketball.

Qu'est-ce que tu aimes voir
au cinéma?

*What do you like to see at
the cinema?*

J'aime les films d'action.

I like action films.

Qu'est-ce que tu as
regardé à la télé hier?

*What did you watch on TV
yesterday?*

Hier, j'ai regardé une
émission de sport.

*Yesterday, I watched a sports
programme.*

Qu'est-ce que tu as fait le
weekend dernier?

*What did you do last
weekend?*

Le weekend dernier, j'ai fait
du sport.

*Last weekend, I did some
sport.*

Les mots essentiels *High-frequency words*

Possessive adjectives

mon/ma/mes *my*

ton/ta/tes *your*

son/sa/ses *his/her*

Negatives

ne ... pas *not*

ne ... jamais *never*

ne ... rien *nothing*

Vocabulaire

(Page 98–99)

Point de départ (pages 78–79)

Où habites-tu?

J'habite dans un village.

J'habite dans une ville.

J'habite dans une grande ville.

J'habite à la campagne.

J'habite à la montagne.

J'habite au bord de la mer.

J'habite en France.

J'habite en Suisse.

J'habite au Maroc.

Quel temps fait-il sur la photo?

Il fait beau.

Il fait mauvais.

Il fait chaud.

Il fait froid.

Il y a du soleil.

Il y a du vent.

Il neige.

Il pleut.

C'est comment?

C'est animé.

C'est calme.

C'est tranquille.

C'est ennuyeux.

C'est joli.

C'est nul.

Where do you live?
I live in a village.
I live in a town.
I live in a city.
I live in the country.
I live in the mountains.
I live at the seaside.
I live in France.
I live in Switzerland.
I live in Morocco.
What's the weather like in the photo?
The weather's fine.
The weather's bad.
It's hot.
It's cold.
It's sunny.
It's windy.
It's snowing.
It's raining.
What is it like?
It's lively.
It's peaceful / quiet.
It's boring.
It's pretty.
It's awful.

Unité 1 (pages 80–81) Elle est comment, ta région?

Qu'est-ce qu'on peut faire

dans ta région?

Dans ma ville ...

Dans ma région ...

On peut manger des crêpes.

*What can you do in your
region?*
In my town ...
In my region ...
You can eat pancakes.

On peut manger du fastfood.

On peut visiter des grottes.

On peut visiter le marché.

On peut visiter des
monuments historiques.

On peut faire du canoë-kayak.

On peut faire des randonnées.

On peut faire du ski.

On peut faire les magasins.

On peut aller au cinéma.

On peut aller à la plage.

Elle est comment, ta région?

Il y a des ...

Il y a beaucoup de ...

Il n'y a pas de ...

bâtiments.

champs.

lacs.

touristes.

forêts.

montagnes.

plages.

voitures.

You can eat fast food.

You can visit some caves.

You can visit the market.

*You can visit historic
monuments.*

You can go canoeing.

You can go for walks.

You can go skiing.

You can go shopping.

You can go to the cinema.

You can go to the beach.

What is your region like?

There are (some) ...

There are lots of ...

There are no ...

buildings.

fields.

lakes.

tourists.

forests.

mountains.

beaches.

cars.

Unité 2 (pages 82–83) Qu'est-ce que tu dois faire à la maison?

Qu'est-ce que tu dois faire
à la maison?

Je dois laver la voiture.

Je dois rapporter l'eau.

Je dois ranger ma chambre.

Je dois garder le bébé.

Je dois nourrir le chien.

Je dois faire la cuisine.

Je dois faire la vaisselle.

Je ne fais rien.

Mon frère doit (laver la voiture).

What must you do at home?

I must wash the car.

I must fetch the water.

I must tidy my bedroom.

I must look after the baby.

I must feed the dog.

I must do the cooking.

I must do the washing-up.

I do nothing./I don't do anything.

My brother must (wash the car).

Ma soeur doit (ranger sa chambre).

Mon frère ne fait rien.

My sister must (tidy her room).

Ma soeur ne fait rien.

My brother does nothing/

doesn't do anything.

My sister does nothing/

doesn't do anything.

tous les jours

every day

souvent

often

quelquefois

sometimes

le weekend

at weekends

le lundi

on Mondays

Je pense que c'est juste.

I think it's fair.

Je pense que ce n'est pas juste.

I think it's unfair.

Unité 3 (pages 84–85) *Ma routine, ta routine*

Je me lève.

I get up.

Je prends le petit déjeuner.

I have breakfast.

Je me douche.

I have a shower.

Je m'habille.

I get dressed.

Je me coiffe.

I do my hair.

Je me lave les dents.

I brush my teeth.

Je me couche.

I go to bed.

à sept heures.

at seven o'clock

à sept heures et quart

at quarter past seven

à sept heures moins le quart

at quarter to seven

à sept heures et demie

at half past seven

à sept heures (vingt)

at (20) past seven

à sept heures moins (dix)

at (10) to seven

Unité 4 (pages 86–87) *J'ai déménagé!*

J'ai déménagé.

I moved house.

J'ai déménagé en ville.

I moved to the town.

J'ai déménagé à la campagne.

I moved to the countryside.

Voici mon nouveau collège.

This is my new school.

Voici ma nouvelle maison.

This is my new house.

C'est un vieux village.

It is an old village.

Il y a un beau jardin.

There is a beautiful garden.

Il y a une belle cuisine.

There is a beautiful kitchen.

Il y a une vieille église.

There is an old church.

Unité 5 (pages 88–89) *Bienvenue en Corse*

Où habites-tu?

Where do you live?

J'habite en Corse.

I live in Corsica.

La Corse, c'est comment?

What is Corsica like?

C'est vraiment animé.

It's really lively.

Qu'est-ce qu'on peut faire en Corse?

What can you do in Corsica?

On peut faire des randonnées.

You can go hiking.

À quelle heure est-ce que tu te lèves?

What time do you get up?

Je me lève à neuf heures.

I get up at 9 a.m.

Qu'est-ce que tu dois faire à
la maison?

What must you do at home?

Je dois faire la cuisine.

I must do the cooking.

Qu'est-ce que tu as fait le
weekend dernier?

*What did you do last
weekend?*

Je suis allé(e) à Ajaccio.

I went to Ajaccio.

Les mots essentiels *High-frequency words*

vraiment..... *really*

très..... *very*

trop..... *too*

Vocabulaire

(Page 122–123)

Point de départ (pages 102–103)

Dans ma ville, on peut ...

Dans mon village, on peut ...

jouer au basket.

jouer au billard.

jouer au foot(ball).

jouer au handball.

jouer au rugby.

jouer au tennis.

jouer au tennis de table.

jouer au volleyball.

faire du footing.

faire du judo.

faire du ski.

faire du vélo.

faire de la gymnastique.

faire de la musculation.

faire de la natation.

faire de la voile.

faire de l'athlétisme.

faire de l'équitation.

Tu es sportif/sportive?

Je suis (assez) sportif/sportive.

Je ne suis pas (très) sportif/sportive.

Tu fais quels sports?

Je joue au rugby.

Je fais du judo.

In my town, you can ...

In my village, you can ...

play basketball.

play snooker.

play football.

play handball.

play rugby.

play tennis.

play table tennis.

play volleyball.

go jogging.

do judo.

go skiing.

go cycling.

do gymnastics.

do weight training.

go swimming.

go sailing.

do athletics.

go horse riding.

Are you sporty?

I am (quite) sporty.

I am not (very) sporty.

What sports do you do?

I play rugby.

I do judo.

Unité 1 (pages 104–105) C'est plus amusant!

Quelle est ton opinion sur ... ?

Je trouve le tennis ...

Je trouve la voile ...

What is your opinion of ... ?

I find tennis ...

I find sailing ...

amusant(e).

compliqué(e).

fatigant(e).

intéressant(e).

passionnant(e).

relaxant(e).

facile.

difficile.

ennuyeux/ennuyeuse.

Je trouve le ski plus difficile
que le cyclisme.

Je trouve la gymnastique
plus facile que le footing.

fun.

complicated.

tiring.

interesting.

exciting.

relaxing.

easy.

difficult.

boring.

*I find skiing more difficult than
cycling.*

*I find gymnastics easier than
jogging.*

Unité 2 (pages 106–107) Pour aller au stade?

Pour aller au bureau d'information?

Pour aller au lac?

Pour aller au restaurant?

Pour aller au stade?

Pour aller au vélodrome?

Pour aller à la piscine?

Pour aller à la gare?

Pour aller à la piste d'athlétisme?

Pour aller à l'hôtel?

Pour aller aux courts de tennis?

Pour aller aux toilettes?

Allez tout droit.

Tournez à droite.

Tournez à gauche.

Prenez la première rue à gauche.

Prenez la deuxième rue à droite.

Prenez la troisième rue à gauche.

How do I get to the information office?

How do I get to the lake?

How do I get to the restaurant?

How do I get to the stadium?

How do I get to the velodrome?

How do I get to the swimming pool?

How do I get to the station?

How do I get to the athletics track?

How do I get to the hotel?

How do I get to the tennis courts?

How do I get to the toilet?

Go straight on.

Turn right.

Turn left.

Take the first road on the left.

Take the second road on the right.

Take the third road on the left.

Unité 3 (pages 108–109) *Qu'est-ce qu'il faut faire?*

Qu'est-ce qu'il faut faire?	<i>What must you do?</i>
Il faut manger des fruits et des légumes.	<i>You must eat fruit and vegetables.</i>
Il faut travailler dur.	<i>You must work hard.</i>
Il faut aller à la salle de fitness.	<i>You must go to the gym.</i>
Il faut être déterminé(e).	<i>You must be determined.</i>
Il faut boire beaucoup d'eau.	<i>You must drink lots of water.</i>
Il faut dormir huit heures par nuit.	<i>You must sleep eight hours a night.</i>
Il ne faut pas consommer de drogue.	<i>You must not take drugs.</i>
Il ne faut pas fumer.	<i>You must not smoke.</i>
Sur la photo, il y a ...	<i>In the photo there is ...</i>
un(e) athlète.	<i>an athlete.</i>
un joueur de basket.	<i>a basketball player.</i>
Il est sur une piste d'athlétisme.	<i>He is on an athletics track.</i>
Elle est sur un terrain de basket.	<i>She is on a basketball court.</i>
Il porte ...	<i>He is wearing ...</i>
un short.	<i>shorts.</i>
un maillot de course.	<i>a running top.</i>
un maillot de basket.	<i>a basketball top.</i>
Il y a des spectateurs.	<i>There are spectators.</i>

Unité 4 (pages 110–111) *Vous allez bien?*

le bras	<i>arm</i>
le dos	<i>back</i>
le pied	<i>foot</i>
le ventre	<i>stomach</i>
la jambe	<i>leg</i>
la tête	<i>head</i>
l'oreille	<i>ear</i>
l'œil / les yeux	<i>eye / eyes</i>
Vous allez bien?	<i>Are you well?</i>
J'ai mal au bras.	<i>I have a sore arm.</i>
J'ai mal au dos.	<i>I have a sore back.</i>
J'ai mal au pied.	<i>I have a sore foot.</i>
J'ai mal au ventre.	<i>I have a sore stomach.</i>

J'ai mal à la jambe.

I have a sore leg.

J'ai mal à la tête.

I have a sore head.

J'ai mal à l'oreille.

I have a sore ear.

J'ai mal à l'œil.

I have a sore eye.

J'ai mal aux yeux.

I have sore eyes.

J'ai un rhume.

I have a cold.

J'ai de la fièvre.

I have a temperature.

Il faut rester au lit.

You must stay in bed.

Il faut utiliser une crème.

You must use a cream.

Il faut prendre des antidouleurs.

You must take painkillers.

Il faut boire beaucoup d'eau.

You must drink lots of water.

Unité 5 (pages 112–113) Allez les futurs champions!

Tu fais quel sport?

What sport do you do?

Je joue au foot.

I play football.

Je joue un match.

I play a match.

Je travaille dur.

I work hard.

Je suis membre d'une équipe locale.

I am a member of a local team.

Je suis membre d'un club local.

I am a member of a local club.

Je marque beaucoup de buts.

I score lots of goals.

Je gagne un match.

I win a match.

Qu'est-ce que tu fais tous les jours?

What do you do every day?

Je vais à la salle de fitness.

I go to the gym.

Je fais de la musculation.

I do weight training.

Qu'est-ce que tu as fait récemment?

What did you do recently?

J'ai joué en compétition.

I played in a competition.

J'ai marqué beaucoup de points.

I scored lots of points.

J'ai gagné une médaille aux J.O.

I won a medal at the Olympic Games.

Qu'est-ce que tu vas faire à l'avenir?

What are you going to do in the future?

Je vais marquer beaucoup d'essais.

I am going to score lots of tries.

Je vais jouer pour la France.

I am going to play for France.

Je vais être membre de l'équipe nationale.

I am going to be a member of the national team.

Je vais gagner la Coupe du Monde.

I am going to win the World Cup.

MUSIC OF THE WORLD KNOWLEDGE ORGANISER

BIG QUESTION

How are rhythms, scales, and melodies used around the world?

TREBLE CLEF NOTATION



The Treble Clef is for higher pitched notes which we play on the right of the keyboard, using our right hand.

Every Good Boy Deserves Football | FACE in the spaces

BASS CLEF NOTATION



The Bass Clef is for lower pitched notes which we play on the left of the keyboard, using our left hand.

Good Boy Deserves Football Always | All Cows Eat Grass

RHYTHM, RESTS, and NOTE VALUES

Rhythms



Cof-fee

Quaver pair
(one beat)



Tea

Crotchet
(one beat)



Milk

Minim
(two beats)



Long

Semibreve
(4 beats)



Quaver

(half beat)



Crotchet

(one beat)



Minim

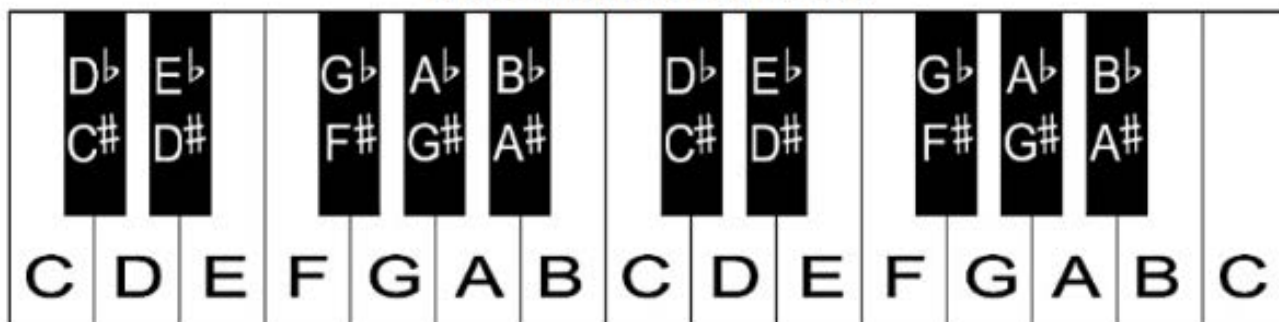
(two beats)



Semibreve

(4 beats)

KEYBOARD LAYOUT



REMEMBER: to find the notes on the keyboard "C is to the left of two black keys"

WORDS

OSTINATO : a repeating musical pattern, such as a rhythm

POLYRHYTHM : multiple, contrasting rhythms, played together

PULSE : the beat of the music you feel

SYNCOPIATION : an emphasis on off-beats

CALL & RESPONSE : a musical pattern is played, then repeated back

SCALE : a sequence of notes

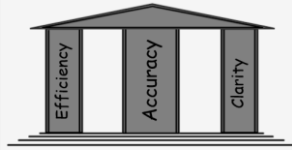
DRONE : a continuous pair of notes

INTRODUCTION TO ARITHMETIC

Arithmetic - The study of numbers and the operations applied to them

The pillars of maths

Mathematics - The problem-solving world



Accuracy - How close something is to being true.

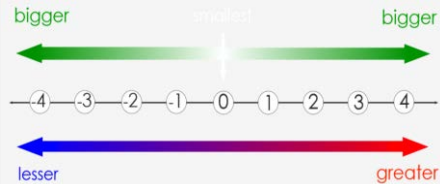
Efficiency - How much time or energy is saved.

Clarity - How easy something is to understand.

Comparing numbers

Scale - used to measure something

Size - How far a number is from 0



Value - How much a number is worth

Equivalent fractions

Scaling any numerator and its denominator creates an equivalent fraction.

$$\frac{3}{4} = \frac{3 \times 6}{4 \times 6} = \frac{18}{24} = \frac{18 \div 2}{24 \div 2} = \frac{9}{12} \neq \frac{9 + 1}{12 + 1} = \frac{10}{13} \neq \frac{10 \times 3}{13 \times 2} = \frac{30}{26}$$

Numerator
 Fraction bar
 Denominator

Scaling - **multiplying** or **dividing** by the same number.

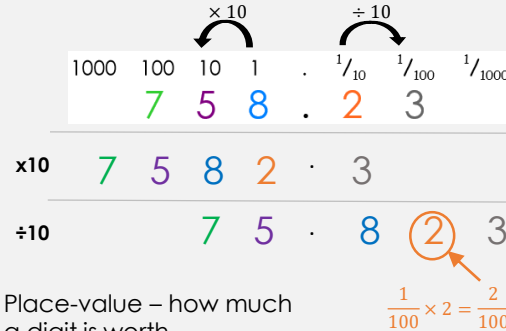
Conventions

Commonly accepted ways through the world of maths.

- + 11 = 11 We do not write the plus sign for negatives.
- 12. = 12 We do not write the decimal point for integers.
- 1.230 = 1.23 We do not write unnecessary zeros.

Decimal number system

The decimal number system is base 10.
10 connects all the place-values.



Place-value - how much a digit is worth

Non-example: x10

$$758.23 \times 10 \neq 758.230$$

Multiplying a decimal by ten moves each digit one place-value higher.

Converting numbers

Convert - To change from one form into another equivalent form.

Example: Terminating decimals to fractions

$$0.4\textcolor{violet}{0}3 = \frac{4\textcolor{violet}{0}3}{1000}$$

Non-zero digits (include **captive zeros**)
Captive Zero (The zeros between non-zero digits)
 Matches the place-value of the last non-zero digit

Example: Fractions to terminating decimals

$$\frac{3}{4} = 3 \div 4$$

$$4 \overline{) 3.00} = 0.75$$

Example: Fractions to recurring decimals

$$\frac{2}{11} = 2 \div 11$$

$$11 \overline{) 0.181818} = 0.\textcolor{violet}{1}8$$

Repetend - A sequence of digits that repeats infinitely

Ordering numbers

ascending

From least to greatest

descending

From greatest to least

Example: Decimals

Arrange 67.89, 6.78 and 0.67 in ascending order

1. Line up equivalent place-values

$$\begin{array}{r} 10 \quad 1 \quad \cdot \quad 1/10 \quad 1/100 \\ 6 \quad 7 \quad \cdot \quad 8 \quad 9 \\ 6 \quad \cdot \quad 7 \quad 8 \\ 0 \quad \cdot \quad 6 \quad 7 \end{array}$$

2. Compare biggest place-values first

3. Order

Answer: 0.67, 6.78, 67.89

Example: Fractions

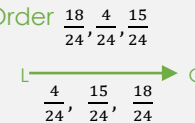
Arrange $\frac{3}{4}, \frac{1}{6}, \frac{5}{8}$ in ascending order

1. Find LCM LCM(4,6,8)=24

2. Scale

$$\frac{3}{4} = \frac{3 \times 6}{4 \times 6} = \frac{18}{24} \quad \frac{1}{6} = \frac{1 \times 4}{6 \times 4} = \frac{4}{24} \quad \frac{5}{8} = \frac{5 \times 3}{8 \times 3} = \frac{15}{24}$$

3. Order



Answer: $\frac{1}{6}, \frac{5}{8}, \frac{3}{4}$

Example: Negatives

Arrange 0, -3, 2, -1, 4 in ascending order



Answer: -3, -1, 0, 2, 4

The number line has **reflectional symmetry** at 0.

Non-example: Negatives

Arrange 0, -3, 2, -1, 4 in ascending order

Answer: 0, -1, 2, -3, 4

Sets of numbers

Set - a collection of numbers		Description
Naturals 1, 2, 3, 4, 5, ...	N	The positive whole numbers.
Integers ..., -2, -1, 0, +1, +2, ...	Z	Every whole number including positives , negatives and 0.
Rationals ... $\frac{7}{18}$, -0.09, 6, 5 $\frac{11}{12}$...	Q	Any number that can be written as a fraction. $\frac{a}{b}$ Where a is an integer and b is a natural number.
Irrationals ... e, $\sqrt{2}$, π ...	I	Numbers that cannot be written as a fraction.
Reals ... $\frac{7}{18}$, -0.09, 6, $\sqrt{2}$, π ...	R	The set of rational and irrational numbers.

'The Adventures of Sherlock Holmes': Knowledge Organiser	Key words	Characters
Scandal in Bohemia – plot overview	deduction – the process of reaching a decision by looking at the facts that are known. Holmes is able to use his skills of deduction to solve crimes.	Sherlock Holmes – a fictional consulting detective created by Arthur Conan Doyle. He is known for his intelligence, introspection and dual nature. He is described as an 'observing machine' because of his ability to capture the essence of people with seemingly very little evidence.
<ul style="list-style-type: none"> The King of Bohemia plans to marry a Norwegian princess. However, he previously had a relationship with a woman called Irene Adler. Adler is threatening to ruin his engagement with a picture she has of herself and the king together. Holmes tricks Adler into revealing where she keeps the photograph, but she outsmarts Holmes and escapes with it. Adler decides not to use the picture against the king. She leaves a picture of herself in its place, which Holmes keeps as a reminder of her. 	scandal – a scandal is something that shocks people because they think it is morally wrong. The King of Bohemia fears that scandal of his relationship with Irene Adler being exposed.	Dr Watson – Holmes' former flatmate, a doctor and his closest companion. The stories are told from his perspective, working as Holmes' assistant.
The Red-Headed League – plot overview	periodical/serial – books, magazines or other entertainment that are released on a regular basis. <i>The Strand Magazine</i> was a periodical that published the Sherlock Holmes stories.	Irene Adler – a famous American opera singer who had a relationship with the future King of Bohemia. To Holmes, she is 'the woman' who outsmarted him.
<ul style="list-style-type: none"> Jabez Wilson gets a job with the mysterious 'Red- Headed League' because of his 'flame' coloured hair. One day, he is mysteriously told that he is no longer needed by the league so visits Holmes to ask him to investigate. Holmes discovers that his story reveals a plot to steal from a bank vault which is successfully prevented. 	introspective – when you examine your own thoughts, ideas, and feelings. Sherlock Holmes can be introspective . This makes him a better detective.	King of Bohemia – in the Victorian era, Bohemia was an area of central Europe; today it is a region of the Czech Republic. The King is engaged to a Scandinavian princess but five years previously was madly in love with Irene Adler. Because of his status, he was unable to marry her at the time, which he regrets. The King still respects Adler.
The Blue Carbuncle – plot overview	dual nature – Holmes has a dual nature: his quiet introspective side, and his manic detecting side.	James Ryder – head attendant of the hotel where the Blue Carbuncle goes missing. He works with his accomplice Catherine Cusack (the countess' maid) to steal the jewel and frame John Horner for the crime. He is racked with guilt and confesses when Holmes questions him.
<ul style="list-style-type: none"> A policeman named Peterson is left with a man's hat and Christmas goose. He takes the goose home to eat and discovers a blue carbuncle (a rare, and very valuable jewel) inside the goose! Holmes recognises the jewel as the one that was stolen from The Countess of Morcar. Using the hat as a clue, Holmes and Watson set off to discover how the blue carbuncle was stolen and how it ended up in a goose. 	Fallible – someone who is fallible makes mistakes. Someone infallible is always right. Holmes seems infallible but Irene Adler proves that he is, in fact, fallible.	Jabez Wilson – a London pawnbroker who has distinctively red hair. His business is struggling so he takes the job working for The Red-Headed League. Wilson was tricked by his assistant Vincent Spaulding who worked alongside another criminal to use his shop to rob the bank next door.
	Background information	Vincent Spaulding/John Clay – Jabez Wilson's assistant. This is actually a disguise for John Clay who attempts a bank robbery using Wilson's shop as an easy passage.
	Sir Arthur Conan Doyle was the author of the Sherlock Holmes stories.	
	Sherlock Holmes' fictional home was 221B Baker Street, which is now a museum of Doyle's life and work.	
	Doyle's short stories were published individually in <i>The Strand Magazine</i> periodical and then collected to form <i>The Adventures of Sherlock Holmes</i> short story collection in 1892.	
	Before he became a writer, Doyle studied medicine.	

Knowledge Organiser – Hindu Dharma



What is a Dharmic Religion?

- **Dharma** is defined differently for each of the Dharmic religions:
 - **Hindu Dharma: Dharma for Hindus is what governs the universe *and* the duty that rules human life**
- Hindu Dharma is the preferred term for Hinduism. 'Hinduism' is a western term coined by Europeans during the 19th century, when India was colonised.

Key words:

Dharma: Defined differently in the different Dharmic religions, but often used to refer to a sense of belonging or duty

Parvati: Mother of the natural world in charge of growth and change.

Puja: Hindu act of worship.

Reincarnation: Cycle of life, the body dies but the atman passes into a different being.

Shiva: Destroyer of evil and protector of the universe.

Brahman: The one Hindu God, who is represented by many different forms of the divine (various gods and goddesses).

Hindu Dharma: The oldest of the Dharmic religions, which originated in the area now called India

Moksha: Being freed from the cycle of life and realising oneness with Brahman.

Atman: Immortal, eternal, divine self, or soul.

Monotheism: Belief in one God.

How is Hindu Dharma a monotheistic religion?

- Hindus believe that God is one, known as **Brahman**.
- He has many functions and he is called many different names. This is why you'll hear about different gods/goddesses
- Hindu Dharma is **not** a **polytheistic** religion: one that believes in multiple gods. It is instead a **monotheistic** religion that sees the one God represented in many forms.

What do Hindu stories teach us about the divine?

- Stories are always important to teach us about different morals and important messages in religions and worldviews.
- The **story of Annapurna** tells us about a few Hindu gods and what they are like, mainly: **Shiva** (the destroyer), **Parvati** (mother of Earth) and **Annapurna** (who Parvati becomes!)
- From this story, we are able to understand that the Hindu God/Brahman plays an important role in maintaining Earth and looking after creation. This God is a loving one!

How are humans connected to the divine?

- Hindus believe in **reincarnation**: depending on how good/bad our actions are in this life, we will be reincarnated after our deaths into a new being
- This is an endless cycle which humans try to escape by achieving **moksha**
- Moksha can be reached by coming to a true understanding of life! For Hindus, this true understanding is all about realising that **we are all part of the divine**. This is what connects us to everything and everyone.

Beyond caste,
Beyond race or family,
Beyond good and bad,
Beyond space,
Beyond time and sense-objects,
You are God himself;
Meditate this within yourself.

Adi Shankra (8th century CE) about **moksha**



How does water shape the land?

Water cycle

- The water cycle is powered by changes in temperature from the sun, and fuels our entire planet
- The water cycle is made up of three main processes – evaporation, condensation, and precipitation
- **Evaporation** happens when the heat from the sun warms surface water – in the form of lakes, rivers, oceans, and runoff from rain – and turns it into water vapour
- **Transpiration** is when water inside plants is turned into water vapour through the same process
- **Condensation** is when the water vapour begins to cool as it rises. As this happens, tiny water droplets come together to form clouds
- **Precipitation** is the rain, snow, sleet, or hail that falls when these water droplets cool enough to turn back into a liquid or a solid
- Water then returns to the ocean as **throughflow** (water that has absorbed into and moves through the soil), **groundwater flow** (water that has soaked below the soil and deep into the earth), or **surface runoff** (water that runs over the top of soil and rocks).



River features

Source – the place where a river begins, usually a marsh or bog

Marsh – an area that floods frequently, where the land is usually wet

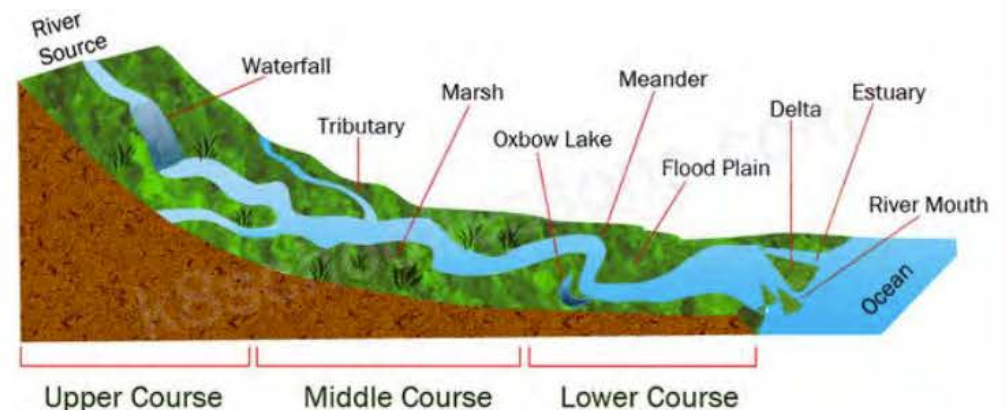
Tributary – small rivers that join a larger river

Confluence – the point at which two rivers meet

Floodplain – the land where a river floods

Mouth – the point where a river meets the sea

Estuary – a point at the mouth of a river where it meets the tide from the ocean/ sea and the freshwater and saltwater mix



River processes

Erosion

- **Hydraulic action** – as water rushes by, it forces air into cracks in the rock, which continue to widen and break
- **Abrasion** – sand and rock are thrown against the riverbed and banks, wearing them away like sandpaper
- **Attrition** – pieces of rock are thrown against each other, causing sharp edges to break off and eventually becoming smaller and rounder
- **Corrosion** – weak acids in the water break down the rock in the riverbed and banks

Transportation

- **Traction** – large stones are rolled along the riverbed
- **Saltation** – smaller stones bounce along the riverbed over one another
- **Suspension** – small particles of rock, dirt, and plants float in the water of a river, making it look cloudy
- **Solution** – particles of rock and chemicals are dissolved and carried along in the water unseen

Deposition

Rivers **deposit** (drop) eroded material as they lose speed when:

- the river becomes shallower
- the amount of water is reduced
- the amount of material being carried increases
- the river reaches its mouth

They do this because they no longer have the **energy** to carry it.

River landforms

Upper course

V-shaped valleys – steep valleys that are formed as the river erodes the land it passes over; they are v-shaped because the land

Waterfalls – steep drops formed by uneven rates of erosion as rivers pass over differing bands of hard and soft rock

Middle course

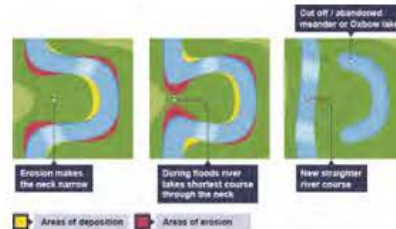
Meanders – bends in the river that are made more extreme as water flows more forcefully around the outside bend, eroding the riverbank further there and leading to deposition around the inside bend

Ox-bow lakes – when a meander bends so much that the river takes a short cut and leaves part of the meander cut off from the rest of the river

Levees – steep banks built up along a river intentionally or as a result of material being deposited on the banks during flooding

Lower course

Deltas – material that is deposited and builds up at the mouth of a river



Factors affecting flooding

Natural

Heavy rain – when it rains very heavily the water doesn't have time to soak into the soil, so it runs over the ground, causing flooding

Soggy soil – when soil is already holding a lot of water, it can't absorb any more

Tributaries – the more a river has, the higher the risk of flooding due to all the extra water

Steep slopes – water flows faster down steep slopes, meaning it doesn't have time to soak into the soil

Impermeable rock – some areas have **impermeable** rock (water cannot pass through) just below the soil, so water can't soak down

Human

Deforestation – leaves can catch rainwater (called **interception**) and tree roots take up a lot of water from soil; when there aren't any trees in an area this cannot happen

Built-up areas – rain can't soak through concrete, so it is carried away by drains and quickly returns to the river; if drains are blocked street can flood quickly even if they are not near a river

River management

Rivers are constantly changing. For humans to live near and utilize rivers they must be managed. Ways of managing rivers can use **hard engineering** (using man-made structures) or **soft engineering** (using parts of the environment in a more natural approach).

Hard engineering

- Dams
- River barriers
- Levees/ embankments
- Overflow channels

Soft engineering

- Afforestation (planting trees)
- Dredging
- Managed flooding

Case Study: Flood management on The River Thames

Almost every year, there is flooding somewhere along the River Thames. The source of this river is in the Cotswolds, and it runs 346km to its mouth at Southend-on-Sea where it meets the North Sea. As it passes through London the flooding is managed by long and short term solutions as outlined below.

Short Term Solutions

- **Put up portable flood barriers:** These are temporary due to flood warnings and stored when not needed. The Thames Barrier is permanent barrier which raise when the risk for flooding London is high.
- **Put anti-flood shutters on homes:** Metal shutters to stop water entering buildings through the windows and doors.

Long Term Solutions

- **Build Embankments (high banks):** The Thames embankments were underground sewage systems and tube lines, but they are now used for flood protection.
- **Dig new river channels:** These divert water from the Thames.
- **Let nature help:** Use flood plains, Plant trees and do not build on flood risk areas.

Drama

Knowledge Organiser

Physical Skills

Movement	How you move
Gait	How you walk
Posture	How you stand
Body Language	How you use your body
Gestures	The movement with part of your body
Facial Expression	How you use your face
Orientation	The direction you stand facing

Vocal Skills

Pace	How fast or slow you speak
Pitch	How high or low you speak
Volume	How loud or quiet you speak
Projection	Speaking clearly so everyone can hear you without shouting
Pause	The breaks you take when speaking
Emphasis	Highlighting a particular phrase or part of a sentence or word
Accent	Changing your voice to show where a character is from
Tone	The emotion within your voice.

Drama Techniques

Freeze Frame

Thought Tracking

Slow Motion

Synchronised Movement

Physical Theatre—Chair Duet

Physical Theatre—Mime

Physical Theatre—Body As Props

Choral Speaking

Set

Flat

Rostra

Flyspace

Truck

Stage Types

Proscenium Arch

End-On Staging

Thrust Staging

Theatre In The Round

Traverse

Promenade

Steps of Rehearsal

Read the Script

Set the Stage

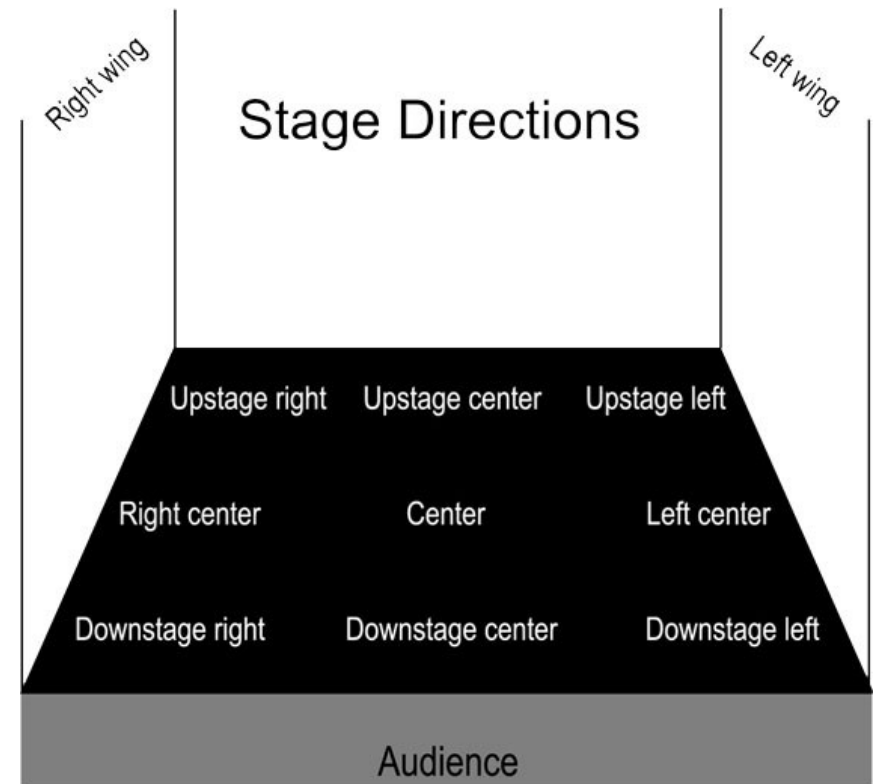
Blocking

Add Physical Skills

Add Vocal Skills

Perform for feedback

Improve





The Rules

Starting the game: A game starts with a tip-off. The referee throws the ball into the air in the centre circle and two opposing players jump up and try to tap it away to gain possession.

Method of scoring: Points are scored when the ball goes through the basketball hoop. If a successful shot is taken inside of the 3 point line, then 2 points will be awarded. If a successful shot is taken from outside of the 3 point line, then 3 points will be awarded. 1 point can also be scored from each successful free throw taken.

Fouls: A foul has been committed if a player hits, pushes, holds or charges at an opponent. If a foul is made during game play, there will be a turnover taken from the side line or baseline. If a foul is made whilst a shot is being taken, then a free throw will be awarded.

Violations:

Double dribbling: A player must not dribble with 2 hands or pick up the ball after dribbling and start dribbling again.

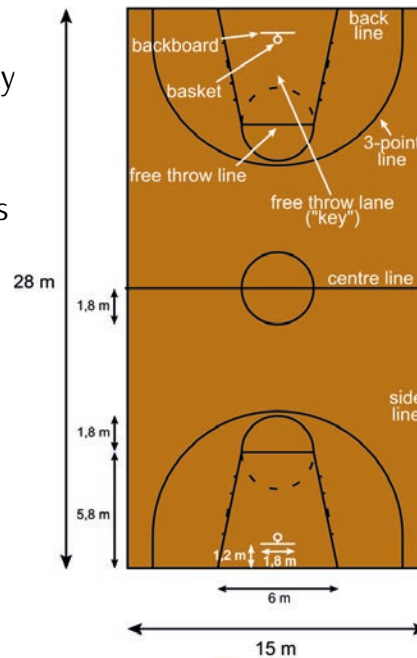
Travelling: A player can only take 2 steps after catching the ball.

Back court violation: Once an attacking player has dribbled the ball forward past the half way line, they must not take it back across whilst it is in their possession.

Time restrictions: The team in possession has 24 seconds on the shot clock, to make a shot.

If a violation is made, a turnover will occur and the ball will be given to the opposing team.

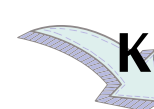
Basketball



Lesson Overview

1. Dribbling
2. Passing and receiving
3. Defending
4. Shooting
5. Lay up and rebounding
6. Game play
7. Assessment

Positions



Key Terminology



KS3

Passing - Sending the ball

Receiving - Catching the ball

Dribbling - Running whilst bouncing the ball in an attempt to beat an opponent

Man marking - Guarding a specific player to prevent them from having success on the ball

Zonal marking - Guarding a specific player to prevent your opponents from gaining success

Tackling - To dispossess an opponent of the ball

Interception - Preventing a pass between players

Attacking - Making an attempt to score by passing or driving forward with the ball

Layup - A shot taken close to the hoop whilst a player is moving

Free throw - A shot given to a player after a foul, taken from the free throw line

Rebound - Gaining possession of the ball after a shot

Turnover - When an offensive team loses possession of the ball

Travelling - Moving without dribbling the ball

Point guard (PG) - They are quick and lead their team to assists and can create opportunities for themselves.

Shooting guard (SG) - Score 3 pointers with ease, create space and are strong defenders.

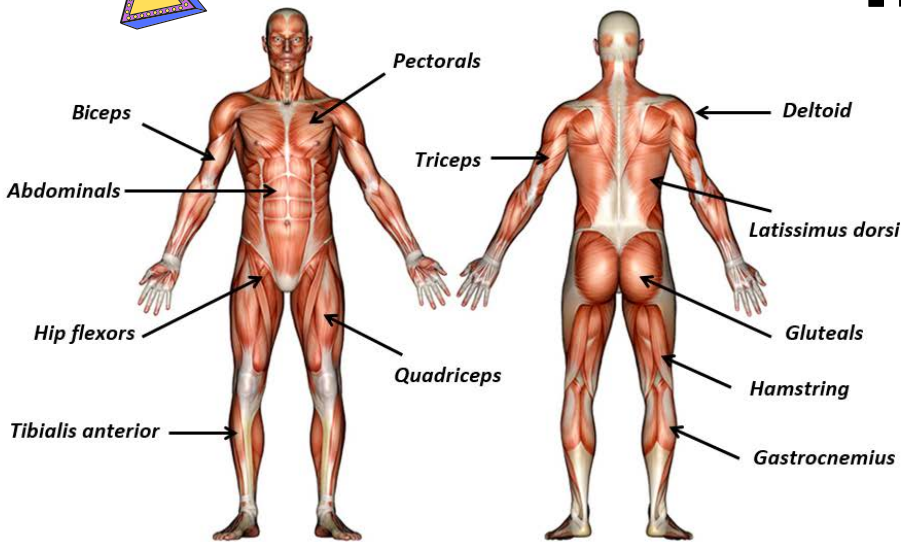
Small forward (SF) - Responsible for scoring, defending and often rebounds.

Power forward (PF) - Score close to the basket and mid-range jump shots.

Centre (C) - Usually plays near the baseline or close to the basket, they gather rebounds and contest shots.

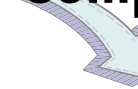


The Muscles



Fitness

Components of Fitness



Agility - The ability to move and change direction quickly, at speed, whilst maintaining control.

Balance - The ability to keep the body stable by maintaining the centre of mass over the base of support. There are two types of balance:
 Static: A balance is performed with little or no movement. E.G a handstand.

Dynamic: A balance is performed when movement takes place. E.G a cartwheel.

Cardiovascular endurance - The ability of the heart and lungs to supply oxygen to the working muscles.

Flexibility - The range of movement possible at a joint.

Muscular endurance - The ability of a muscle or muscle group to undergo repeated contractions, avoiding fatigue.

Power - Strength X Speed

Reaction time - The time taken to start responding to a stimulus.

Speed - Distance ÷ time.

Strength - The ability to overcome resistance

Coordination - The ability to use two or more different parts of the body together, smoothly and efficiently.

Types of Training

Circuit Training

Involves completing a series of exercise, called stations, which are completed one after another, with a brief period of rest inbetween.

Interval Training

Involves alternating between periods of work and periods of rest.

Static Stretching

Involves holding a stretch for up to 30 seconds.

Plyometric Training

Involves high-impact exercises that teach the muscles to perform their maximum contractions faster; to be more powerful. E.G jumping, hopping and bounding.

Fartlek Training

Fartlek is a Swedish word meaning 'speed play'. It involves periods of fast work with intermittent periods of slower work.

Continuous Training

Involves working for a sustained period of time without rest.

Weight Training

Weight training involves the use of weights or resistance to cause adaptations to the muscles.



Repetitions

The number of times an individual activity is performed.

Sets

A group of repetitions.

Maximum heart rate =
220-age

Aerobic

Anaerobic

The Netball Court

Lesson Overview

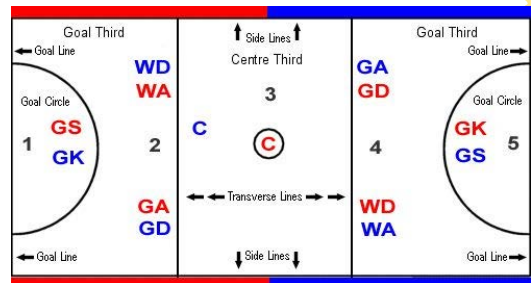
1. Footwork
2. Passing and receiving
3. Timing of pass
4. Attacking play
5. Shooting
6. Defensive play
7. Assessment

Netball

Player Positions



KS3



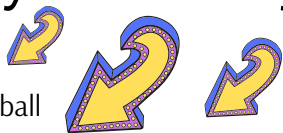
Footwork

A player can receive the ball...

1. With both feet grounded or jump to catch the ball and land with both feet at the same time. The player can then choose one foot to move (not both).
2. Landing on one foot then the other. The first foot is the landing foot and this foot cannot be moved, other than to pivot on the spot. The second foot can move.

If you break the footwork rule, a free pass will be awarded to the other team.

Key Vocabulary



Passing - sending the ball

Receiving - catching the ball

Footwork - how you land when in control of the ball

Dodging - a way to change direction quickly

Defending - preventing the other team from gaining possession of the ball and scoring

Attacking - making an attempt to score

Marking - a way to prevent your opponent from receiving or passing the ball or shooting

Shoot - attempt to score a goal

Offside - moving into an area where you're not permitted

Interception - preventing a pass between players

Throw in - a free pass taken off court

Centre Pass - taken to start or restart the game

Free Pass - awarded when there is an infringement of the rules by a player

Penalty Pass - as above, when two players are involved

Goal Third & Centre Third - areas of the court

- Goal Shooter (GS)** - To score goals and to work in and around the circle with the GA.
- Goal Attack (GA)** - To feed and work with the GS and to score goals.
- Wing Attack (WA)** - To support the circle players, giving them shooting opportunities.
- Centre (C)** - To take the centre pass and to link the defence and the attack.
- Wing Defence (WD)** - To look for interceptions and prevent the WA from feeding the circle.
- Goal Defence (GD)** - To win the ball and reduce the effectiveness of the GA.
- Goal Keeper (GK)** - To work with the GD and to prevent the GA/GS from scoring goals.

Rules of the Game

Held ball - A player is only allowed to hold the ball for 3 seconds. A free pass is awarded to the opposing team if the ball is held for longer than 3 seconds.

Obstruction - A player attempting to intercept the ball must be at least 3ft away from the player with the ball. The distance is measured from the landing foot of the player with the ball. If you are closer than 3ft, a penalty pass will be awarded.

Contact - This occurs when a player's actions interfere with an opponent's play, this can be accidental or deliberate. This includes; physical contact, using any part of the body to limit an opponent's ability to move freely (pushing, tripping or holding), placing a hand on the ball held by an opponent, removing it from an opponent's possession or pushing the ball in to an opponent when holding it.

Over a third - The ball cannot be thrown over a complete third without being touched or caught by a player. A free pass shall be taken from where the ball crossed the second line (i.e. where the ball shouldn't have been)

Replayed ball - A player can not; toss the ball in to the air and catch it again without it being touched by another player, catch a rebound from a shot on goal if it has not touched the post or another player, or pick it up again after losing control if it has not been touched by another player.

Offside - A player with or without the ball cannot move into an area of the court that is not designated for their position. This will result in a free pass to the other team.



Dance

Levels

Distance from the ground:
low, medium or high.



Motif

A movement phrase encapsulating an idea that is repeated and developed throughout the dance.



Timing

The use of time or counts when matching movements to sound and/or other dancers.



Key Terminology

Formations

Shapes or patterns created in space by dancers.



Choreography

The art of creating dance.



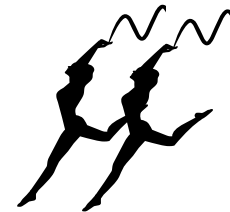
Canon

When the same movements overlap in time.



Unison

Two or more dancers performing the same movement at the same time.

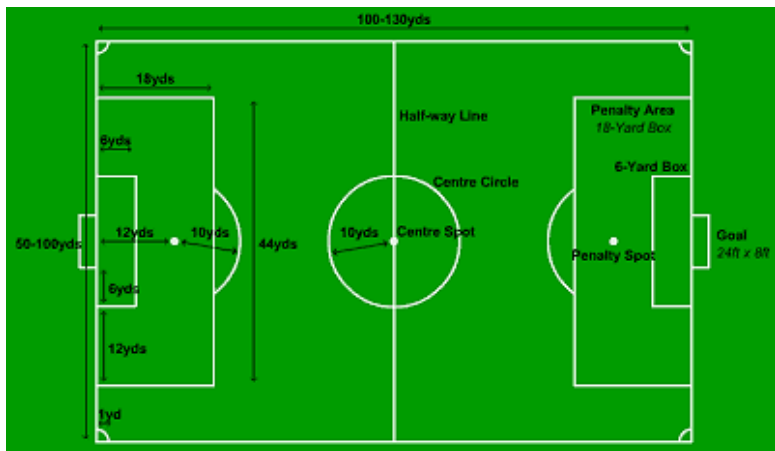


Extension

Lengthening one or more muscles or limbs.



The Football Pitch



Key terminology

Passing - Sending the ball to another player

Receiving - Getting the ball from another player

Dribbling - Running with the ball in an attempt to beat an opponent

Jockeying - Is the defender's skill of keeping between the attacker and their intended target (usually the goal)

Tackling - To dispossess an opponent of the ball

Marking - A way to prevent your opponent from receiving or passing the ball, or taking a shot

Attacking - Making an attempt to score

Crossing - A cross is a medium to long range pass from a wide area of the field towards the opposition's goal

Shot - Attempting to score a goal

Offside - Moving into an area where you're not permitted

Interception - Preventing a pass between players

Ball

Lesson Overview

1. Passing and receiving
2. Dribbling and turns
3. Shooting
4. Heading
5. Attacking
6. Defending
7. Assessment



Rules of the Game

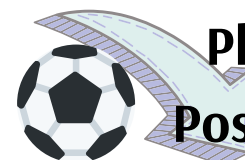
Starting the game - The game begins with the toss of a coin, and the winning captain decides which goal to defend or to take the first kick off.

Method of scoring - A goal is scored when the ball has completely crossed the goal line, provided that no other infringements have taken place.

Fouls - A foul has been committed if a player trips, kicks, pushes, charges another player recklessly, striking of any kind, makes a tackle but connects with the player before the ball, deliberately handles the ball, obstructs an opponent or prevents them from releasing the ball.

Freekicks - Used to restart play after a foul or infringement has taken place. They are usually taken from the place from which the offence was committed. Free kicks can be direct (where the free kick taker may score directly) or indirect (where the free kick taker and a second player must touch the ball before a goal can be scored).

Penalty kick - A penalty kick is awarded for a foul committed by a defending player in their own penalty area. The kick is taken from the penalty spot and all other players except for the goal keeper and penalty taker must be at least 9.15m from the spot.



Player Positions

KS3

Goalkeeper - To prevent the opposing team from scoring.

Defenders - A defender is an outfield player whose primary role is to prevent the opposing team from scoring goals.

Midfielders - Midfielders are generally positioned on the field between their team's defenders and forwards.

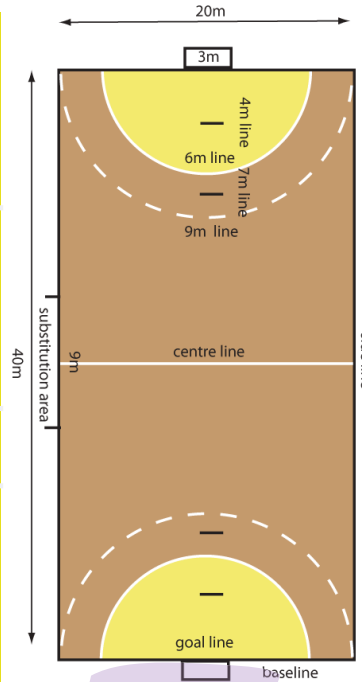
Strikers - Strikers are the players on a football team who play nearest the opposing team's goal, and are therefore the most responsible for scoring goals.



The Rules

Allowed	Not Allowed	Consequences
Throw and catch the ball using hands and arms.	Block or kick the ball using your feet.	Free throw to the defending team.
Pass the ball to a team mate.	Hold the ball for more than 3 seconds.	Free throw to the defending team.
Bounce the ball with one hand and catch it again.	Bounce the ball, catch it and bounce it again - dribble fault.	Free throw to the defending team.
Take a maximum of 3 steps with the ball.	Take more than 3 steps with the ball.,	Free throw to the defending team.
Move outside the goal area.	Enter the goal area.	Goalkeeper throw.
Touch the ball in the air above the goal area.	Touch the ball lying in the goal area.	Goalkeeper throw.
Break through the defence.	Charge the opponent.	Free throw to the defending team.
Pass the ball in order to create a scoring chance.	Keeping the ball in possession without creating a scoring chance - passive play.	Free throw to the defending team.
Use the hands and arms to block the ball.	Pull or hit the ball out of the hands of the attacking player.	Free throw to the attacking team.
Make a frontal body contact with the attacking player.	Hold the attacking players shirt/body, push/run into them.	Free throw/progressive punishment.
Stay outside of the goal area.	Use the goal area as a defence position.	7 metre throw.
Stay 3m away from an opposing player when restarting the game.	Interfere with a player attempting to restart the game.	Progressive punishment.

Handball



Lesson Overview

1. Passing
2. Dribbling
3. Shooting
4. Blocking
5. Defensive play
6. Attacking play
7. Assessment



Playing Positions and Officials

KS3

Goalkeeper – the player who defends the goal with just about every part of the body! The goalkeeper is the only player who can touch the ball with their feet.

Centre – a creative handball player who directs play in both defence and attack. Also known as the ‘playmaker’ and sets up the tactics and the players in shooting positions.

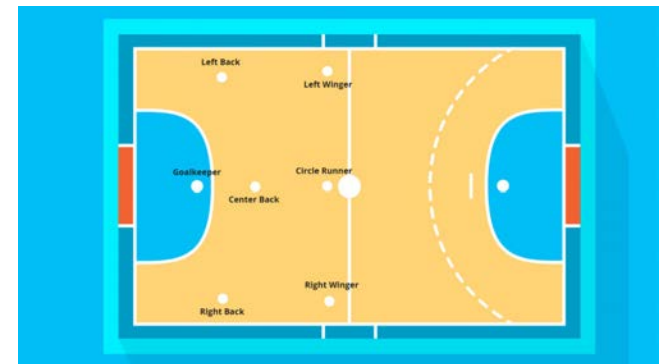
Left and right backs – usually the largest players on the handball team. When defending, they try to block shots, and in attack they are the long-range handball shooters.

Circle runner – the creative force in attack and disruption to opponents when defending. The circle runner is quick and gets in among opposing defenders to either create openings for teammates or to get into a good scoring position themselves.

Left and right wingers – the fast players who patrol the sides of the court. They counter opposing wingers and in attack look to create openings for others, or shoot from the more difficult angles.

Substitutes – substitution is allowed at any moment, without limit and without time stoppage. There are seven substitutes on the side lines for each handball side. But a substitute can’t play until the player they are swapping for is off the court.

The officials – there are four handball officials: a scorekeeper; a timekeeper, and two referees who control the play at close quarters.



The Game

Boy

Player Positions

KS3

You have 6 attempts to score a try. The defending team must stop the opposition from scoring by tackling the player with the ball. Once 6 tackles have been completed by the defending team the ball is turned over for the other team to try and score with 6 attempts.

Rules of the Game

The game starts with a '**kick off**' and this must be a drop kick.

There are 13 on field players per team.

The ball must be passed (out of hand) backwards only.

After 6 completed tackles the '**hand over**' rule applies and the ball is given to the other team.

No tackle should be above the shoulders and shoulder barging is penalised.

No '**stripping**' the ball carrier of the ball.

No **rucks** or **mauls** can be formed.

Offside is when a player is in front of the ball and interferes with play or the ball is passed to them.

If the ball is kicked off the field of play this is called 'out of play' and the game restarts with a '**tap kick**' and they pass in field to a designated player.

A **scrum** is awarded for a knock on or a forward pass.

Players 8,9,10,11,12 and 13 form the scrum.

Player 9 is called the 'hooker' and is responsible for striking the ball back with his foot to player 13.

Player 7 is responsible for putting the ball in the scrum.

Penalty kicks are awarded for infringements of the rules, dangerous play, gamesmanship and dissent.

The referee can **sin bin** a player if they decide the offending player was unsafe in a tackle, dissent, carried out a dangerous act on the field and not playing to the laws of the game. If a player is sin binned they must leave the field of play for 10 minutes. More than 1 player can be sin binned at a time.

Red cards are awarded for serious offences and the player can not return to the game or be replaced.

Play the ball - After every completed tackle the player must stand up and play the ball.

Kicking the ball is allowed at any time but generally performed after the 4th or 5th tackle for tactical reasons.

1 - Gathers and catches kicks from the opposition, tackles any player breaking through the line of defence and supports players 2,3,4,5 and 6 when attacking. Generally the smallest and fastest player on the pitch.

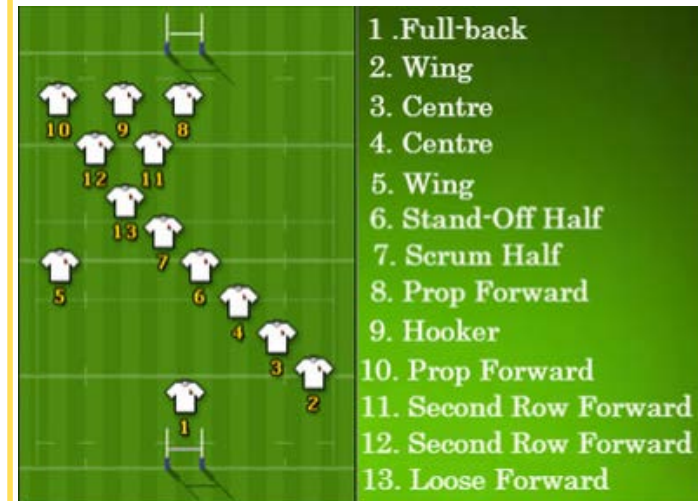
2,3,4,5 and 6 - Their main role is to score tries and defend the wide channels.

6 - The most creative player. Their main role is to create gaps and spaces to set up opportunities for 2,3,4 and 5 to score.

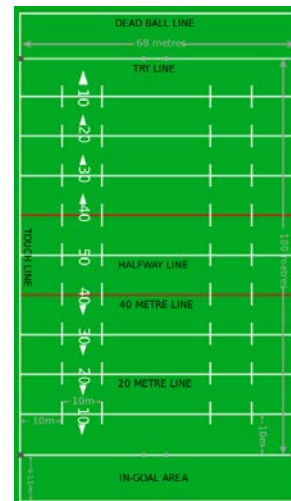
7 - Collects the ball from all restarts and links up with player 6 to create opportunities for attacking players

8,9,10,11,12 and 13 - These are the biggest players who form the scrum. They are responsible for defending the centre of the pitch, trying to break through the defensive wall of the opposition and set up opportunities for others to score.

Positions at Kick Off



The Pitch



Lesson Overview

1. Ball familiarisation
2. Passing and receiving
3. Use of width
4. Tackling technique
5. Attacking play
6. Develop attacking/kicking out of hand
7. Assessment

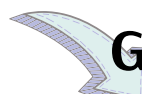
Scoring

- Try = 4 points
Conversion = 2 points
Penalty = 2 points
Drop goal = 1 point



The Rules

Table Tennis



Gripping the Bat

KS3

Starting a game: Service is decided by a coin toss.

Service:

The player serving must stand with the ball held behind the endline of the table.

The ball must be held over the height of the table in the palm of the free hand.

The server must toss the ball without spin, upwards, at least 16cm

The server cannot obstruct the sight of the ball, the opponent and umpire must have a clear view of the ball at all times.

When serving, the ball must bounce once on the servers side and then bounce at least once on the opponent's side. If the ball strikes the net but does not strike the opponent's half of the table, then a point is awarded to the opponent.

However, if the ball hits the net, but goes over and bounces on the other side, it is called a let. Play stops and the ball must be served again. A player commit any number of lets without a penalty.

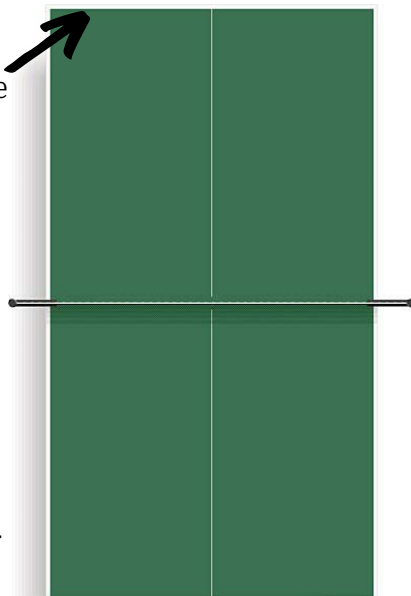
Returning service:

To make a good return of service the ball must be returned before it bounces twice on your side of the table.

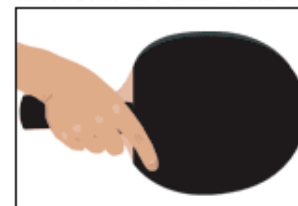
Hitting the ball:

The ball must be hit so that it passes over or around the net.

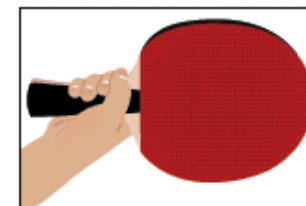
If a player cannot return a hit over or around the net so that the ball bounces on the opposite side of the table, the player loses the point.



SHAKEHANDS GRIP FRONT



SHAKEHANDS GRIP BACK



Key Terminology

Backhand: A shot done with the racket to the left of the elbow for a right hander, the reverse for a left hander.

Backspin: Backward spin placed on the ball.

Closed: Holding the racket such that the racket's hitting surface is aimed downward, with the top edge leaning away from you.

Cross-table: A ball that is hit diagonally from corner to corner.

Dead: A ball without any spin.

Drive: The basic topspin shot or smash executed close to the table. **Forehand:** Any shot done with the racket to the right of the elbow for a right hander, the reverse for a left hander.

Game: Set. Each game is played to 11 points unless a deuce occurs.
Game Point: Last point of a game.

Let: Service ball hitting the net or a distraction that causes the point played over.

Open: Holding the racket such that the racket's hitting surface is aimed outward, with the top edge leaning towards you.

Push: A push is an underspin shot executed over the table, and usually close to the net. This is a passive shot that is used when it is impossible to attack a ball.

Rally: The period in which the ball is in play.

Shake hand: The most popular grip. It gives the best balance of forehand and backhand.

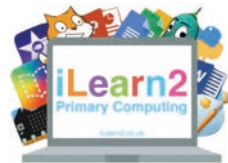
Spin: The rotation of a ball.

Topsin: Spin placed on a ball to allow it to curve down onto the table.

Stroke: Any shot used in the game, including the serve.

Topspin: Spin placed on a ball to allow it to curve down onto the table.





App Design Knowledge Organiser



? What are we learning about app design?

We are using apps for everything now; entertainment, shopping, education, socialising, banking and much more but before apps are made, they need to be designed. Mobile apps are designed differently to websites because they are often used on a smaller screens, such as mobile phones. The navigation (the way to move between the different pages) is often at the bottom of the screen and the icons are bigger because the user will touch them with their finger and not a mouse cursor.



National Curriculum Content

Select, use and combine a variety of software on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals.



Key knowledge

Know how to use the tools in different presentation software (PowerPoint, Keynote, Google Slides) to design an app about your school with:

- Slide size and background colour.
- Text and images (including transparent images) on different pages.
- Icons and interactive hyperlinks between pages.



Important Vocabulary

Screen dimensions	The size of the screen (width and height). Each device has a different screen size.
Icons	Small graphics (icons) are used in apps instead of text because they are easier to tap.
Navigation	The way the user will move between the different pages of the app. The navigation is often different icons at the bottom of the screen.
Hyperlinks	These are links added to icons or text which takes the user to another page in the app when they are tapped.
Duplicate	Pages in your app can be duplicated (copied) to make it quicker to create similar looking pages.



Quick tips

- Remember that the pages you are designing will be used on a smaller screen, such as mobile phone, so keep the icons and text big enough to see and use.
- Create one page (slide) with all the navigation icons on and then duplicate the slide to save time having to create the icons over and over again.
- Keep you app to 4-5 pages.
- Once you have added the hyperlinks to the navigation on the different pages, click the play icon to test it.

App Design

