

# Knowledge Organiser – Superheroes

## Who was Isambard Kingdom Brunel and why do we remember him?

Brunel was an inventor, a designer and engineer, who built bridges, tunnels and ships. In Victorian England, he created structures and vehicles, which to others seemed impossible. Chances are, at some time you have travelled through a tunnel or crossed a bridge which Brunel built. Some people have even called him the Greatest Britain ever.



Brunel 1806 – 1859



Clifton Suspension Bridge



SS Great Britain



The Great Western Railway

He was an engineer during the Victorian Era. Thanks to Brunel, we're able to travel up and down the country quickly, as well as cross many rivers.

The city that still homes many of Brunel's greatest achievements. Brunel designed the Clifton Suspension Bridge, Temple Meads Station and the SS Great Western.

When built in 1843, she was the longest passenger ship in the world. She was designed to transport people to America and could travel across the Atlantic in 14 days.

In 1835, Brunel was asked to build a railway that would connect Bristol to London. The first trains ran in 1838. The railway is still in operation today.

## Key Vocabulary

Railway – a set of tracks on which a train runs.

Bridge – a structure built over a river, railroad or obstacle that allows people to cross.

Suspension bridge – a bridge that is supported from above by cables.

Engineer – someone who uses scientific knowledge to design, construct and maintain engines, machines or structures.

Station – a regular stopping place of vehicles.

Impact – a strong and powerful effect.

Research – a careful study of something to find out more information.

Significant – having an important consequence.

Evidence – something that gives proof

Historians – an expert on History.



## Key Dates

1806 – Isambard Brunel was born.

1831 – Work starts on Clifton suspension Bridge but is abandoned in 1843.

1833 – Brunel appointed Chief Engineer to Great Western Railway and starts surveying route. Begins modernisation of Bristol Docks.

1836 – Work begins on Box Tunnel. Appointed engineer of Great Western Steam Ship company and construction begin.

1838 – SS Great Western sails from Bristol to New York in 15 days.

1852 – Construction of Paddington Station begins.

1858 – SS Great Eastern launched.

# Edward Jenner

Edward Jenner (1749 – 1823) was the first doctor to successfully create a vaccine. He created a vaccine using cowpox in order to immunise people from the much deadlier smallpox disease. His ideas were ridiculed by fellow scientists. Nevertheless, Jenner bravely and successfully completed his tests, and his findings could not be refuted. Thanks to his discovery, smallpox was eventually eradicated.



## A timeline of the Vaccine

### Timeline

#### Smallpox and government intervention, 1840–72

**1837–40** A smallpox epidemic breaks out.

35,000 people die. *The Lancet*, a medical journal, blames inoculation for the outbreak.

**1852** The government makes smallpox vaccination compulsory.

**1872** The British government begin to enforce the compulsory vaccination.

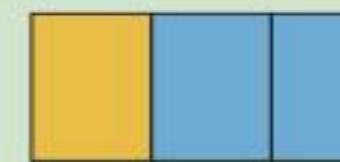
**1803–1807: Government gave Jenner £30,000**

**1840** The government makes inoculation a crime.

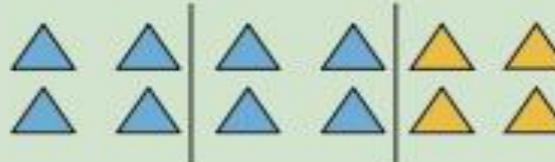
**1840** The government agrees to provide children with vaccinations at the taxpayer's expense.

**1871** Public Vaccinators\* are appointed.

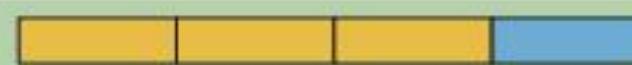
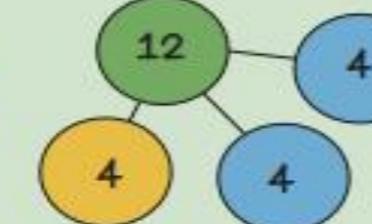
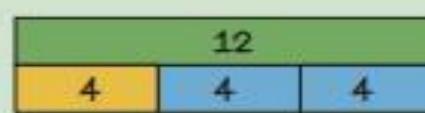
One third is one of three equal parts



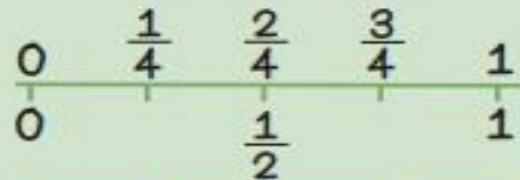
$\frac{1}{3}$  of the whole is yellow



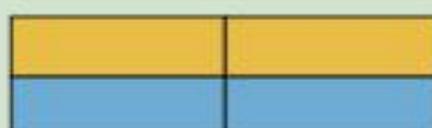
Share equally into 3 groups



$\frac{3}{4}$  of the whole is yellow  
3 of 4 equal parts

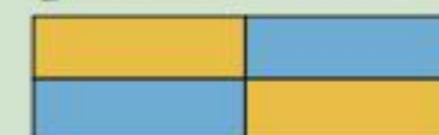


Two quarters are equivalent to one half

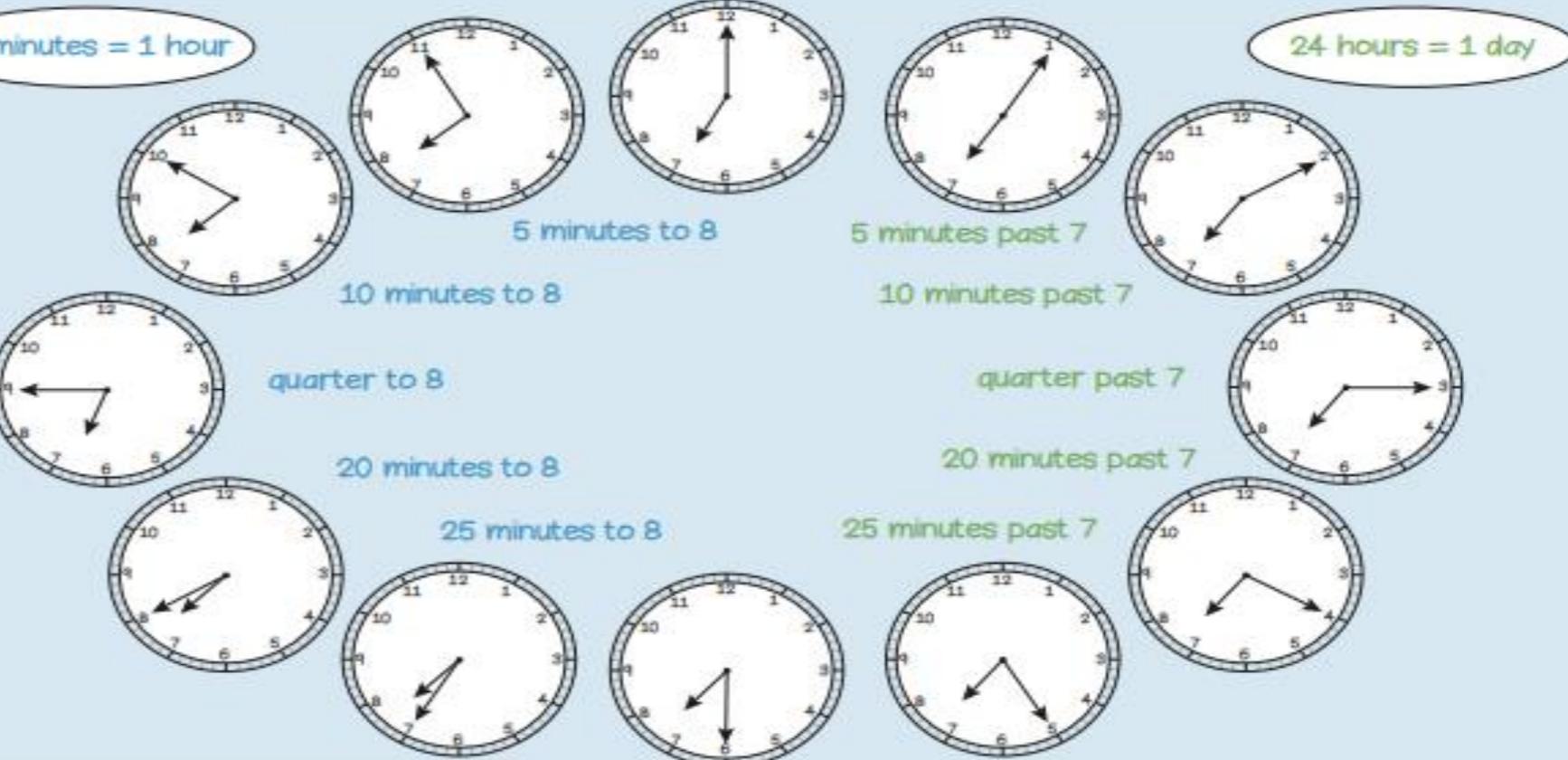


$\frac{2}{4}$  of the whole is yellow

$\frac{1}{2}$  of the whole is yellow



60 minutes = 1 hour

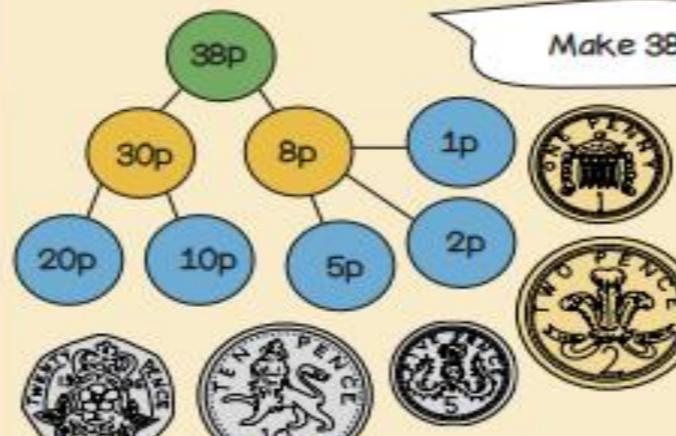


## Year 2 Term 4



$\pounds 5 + \pounds 10 = \pounds 15$

Make 38p



70p in different ways



12p change from 50p



Spend 38p



62p change from £1





## Knowledge Organiser: Living things and their habitats



### Lesson Sequence



1. Compare the differences between things that are living, dead, and things which have never been alive



2. Identify and name a variety of plants and animals in a microhabitat



3. Design a suitable microhabitat where living things could survive



4. Find out what animals eat to survive in their habitat



5. Understand food chains



6. Understand the journey food makes from the farm to the supermarket

Careers connected to habitats:  
ecologist, environmentalist, naturalist



### Food Chain

The grass is eaten by the rabbit.



The rabbit is eaten by the fox.



### Dead or Alive

living			All living things breathe, eat, grow, move, reproduce and have senses.
dead			Something that was once a living thing.
non-living			Something that has never been alive.

### Microhabitats



### Habitats





## Unit Rocket Words: Year 2 – Living things and their habitats



### Rocket Words

reproduce	to create young, offspring or babies
excrete	to get rid of unwanted substances from the body
respire	to breathe
habitat	the natural place where a living thing can survive
microhabitat	a small natural area where a living thing can survive, found within larger habitats
survive	to remain alive
producer	a plant at the start of a food chain
consumer	a living thing that eats other living things

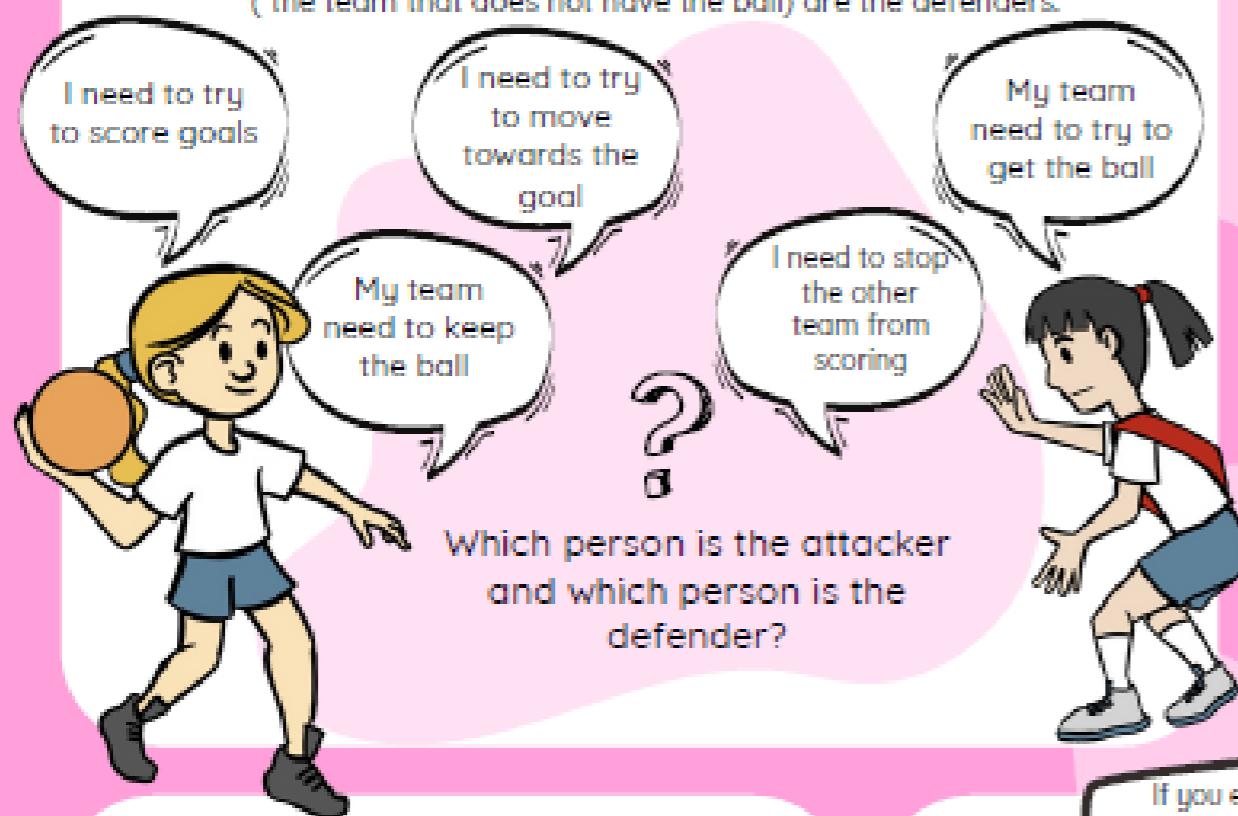
# Knowledge Organiser

## Invasion Year 2

### About this Unit

Invasion games are games where there are two teams and two goals. Teams try to score in the opposite team's goal. Examples include football, handball, rugby, netball, basketball, hockey.

In invasion games, the team that is in possession of the ball (the team that has the ball) are the attackers. The team that is not in possession of the ball (the team that does not have the ball) are the defenders.



### Key Vocabulary



attack	opponent	score
defend	possession	shoot
defender	receive	tactic
goalkeeper	send	teammate
mark		



### Ladder Knowledge



Sending & receiving: controlling the ball before sending it will help you to get it to the right place or person.

Dribbling: keeping your head up will help you to see where defenders are. moving into space away from defenders helps you to pass and receive a ball.

Space: when your team is in possession of the ball you are an attacker and we can score.

Attacking: when your team is not in possession of the ball, you are a defender and need to try to get the ball. Standing between the ball and the attacker will help you to stop them from getting the ball.

### Movement Skills

- dribble
- throw
- catch
- kick
- receive
- run
- change speed
- change direction

This unit will also help you to develop other important skills.

### Social Emotional Thinking

communication, kindness, support others, co-operation, respect, collaborate  
empathy, perseverance, honesty, integrity, independence  
creativity, select and apply, comprehension, problem solving, provide feedback

### Rules

### Tactics

Know how to score points for each game and follow simple rules.

### Attacking tactics

- Move into space towards goal
- Make quick decisions to pass
- Communicate with each other to let a teammate know you are free.

### Defending tactics

- Mark an opponent
- Stand in between the attacker and the ball
- Have someone take on the role of goalkeeper.

### Healthy Participation



- Make sure any equipment not used is stored out of the way.

### Home Learning

Find more games that develop these skills in the Home Learning Active Families tab on [www.getset4education.co.uk](http://www.getset4education.co.uk)



### Protect the gate



What you need: 3 players min, three objects and a ball or pair of rolled up socks.

#### How to play:

- Place three objects in a triangle formation.
- One player (the defender), begins next to the triangle.
- The other player (the attacker) begins with the ball 4m away from the triangle.
- The attacker can move anywhere as long as they remain 4m away from the triangle. The attacker scores points by rolling the ball through the triangle.
- Six attempts then change roles.



What was your score /6?

[www.getset4education.co.uk](http://www.getset4education.co.uk)

Head to our youtube channel to watch the skills videos for this unit.



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# Knowledge Organiser

## Target Games Year 2

### About this Unit

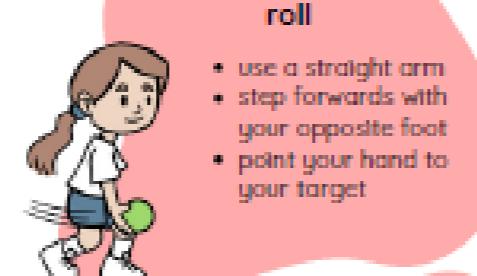
Target games are games where players send an object towards a target. It could be while avoiding obstacles, getting closer to a target than an opponent or by hitting a target in the fewest turns. It could also be a moving target.

Examples of target games are dodgeball, golf, curling, bocce, archery, bowling.



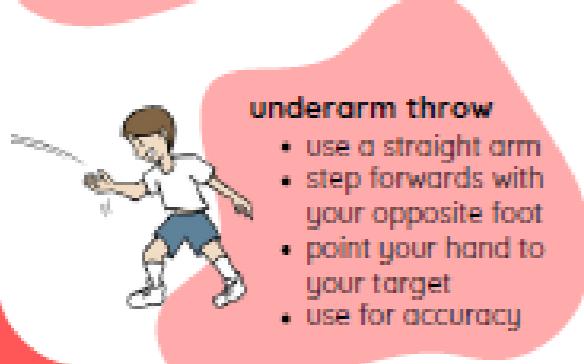
#### overarm throw

- elbow high
- step forward with your opposite foot
- use for distance



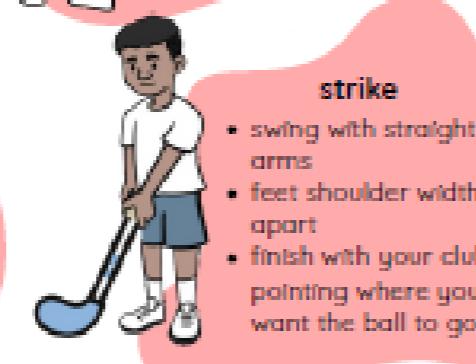
#### roll

- use a straight arm
- step forwards with your opposite foot
- point your hand to your target



#### underarm throw

- use a straight arm
- step forwards with your opposite foot
- point your hand to your target
- use for accuracy



#### strike

- swing with straight arms
- feet shoulder width apart
- finish with your club pointing where you want the ball to go

### Key Vocabulary



accurate

release

ahead

strike

aim

target

opponent

teammate

overarm

underarm



If you enjoy this unit why not see if there is a club in your local area that plays a target game. Examples could be a dodgeball or golf club.

### Ladder Knowledge



#### Throwing:

stepping with opposite foot to throwing arm will help you to balance. Moving your arm quicker will give you more power.

#### striking:

finish with your object/hand pointing at your target.

### Movement Skills

- roll
- overarm throw
- underarm throw
- strike
- dodge
- jump

This unit will also help you to develop other important skills.

**Social** congratulate, support others, co-operation, kindness

**Emotional** manage emotions, honesty

**Thinking** identify areas of strength and areas for development, select and apply, comprehension, decision making

### Rules

Know how to score points for each game and follow simple rules.

### Tactics

Use and apply simple tactics. They help us to make a plan to complete a challenge.

### Healthy Participation



- Make sure unused balls are stored safely.
- If hitting a ball make sure there is a safe space.

### Home Learning

Find more games that develop these skills in the Home Learning Active Families tab on [www.getset4education.co.uk](http://www.getset4education.co.uk)



### Bowls

What you need: two players, a marker and three pairs of socks each

#### How to play:

- Play against another player.
- Place a target marker on agreed distance from a start line.
- Takes turns to roll or throw your sock towards the target marker.
- Whoever lands closest to the target marker wins the round.
- Play first to ten points.



[www.getset4education.co.uk](http://www.getset4education.co.uk)

Head to our youtube channel to watch the skills videos for this unit.



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## Puzzle Outcomes

- To know what I need to keep my body healthy.
- To be motivated to make healthy lifestyle choices.
- To show or tell you what relaxed means and I know some things that make me feel relaxed and some that make me feel stressed.
- To tell you when a feeling is weak and when a feeling is strong.
- To understand how medicines work in my body and how important it is to use them safely.
- To feel positive about caring for my body and keeping it healthy.
- To sort foods into the correct food groups and know which foods my body needs every day to keep me healthy.
- To have a healthy relationship with food and know which foods I enjoy the most.
- To make some healthy snacks and explain why they are good for my body.
- To express how it feels to share healthy food with my friends.
- To decide which foods to eat to give my body energy.
- To have a healthy relationship with food and know which foods are most nutritious for my body.

## Weekly Celebrations

Week 1-Have made a healthy choice.

Week 2 – Have eaten a healthy, balanced diet.

Week 3 – Have been physically active.

Week 4 – Have tried to keep themselves and others safe.

Week 5 – Know how to be a good friend and enjoy healthy relationships.

Week 6 – Know how to keep calm and deal with difficult situations.

## Healthy Me at Haydon Wick Primary School

As good citizens of Haydon Wick Primary School, it is important that we care for our own health and well-being. We are also aware of the well-being of others in our school and work together to support each other to be healthy and happy.

## Our Values of the term:

Love and Humility



## Y2 PSHE Jigsaw Knowledge Organiser Healthy Me

### Key Vocabulary

Lifestyle	The usual way of life of a person, group, or society.
Healthy	Being sound and well – not unwell.
Unhealthy	In bad health – unwell.
Medicines	Something (as a pill or liquid) used to prevent, cure, or relieve an illness or disease.
Safe	Free or secure from harm or danger.
Dangerous	Involving possible injury, pain, harm, or loss.
Balanced diet	Balanced amounts in proper proportions of carbohydrates, fats, proteins, vitamins, minerals, and water intake.
Portion	A serving of a specific amount of food.
Energy	The ability to do work.
Nutritious	Having a large amount of vitamins, minerals, or other nutrients.