

Dear parents / carers of Hawthorn Class children,

Please find below a **suggestion** of learning tasks for the coming week. As this is the final 3 days of the year we have set a variety of investigations and larger tasks to complete. We hope that you will have some fun working on these and that you are able to get outside and enjoy some time over the holidays with friends and family when you can.

- 1 – Daily reading and consideration / discussion of text.
- 2 – Maths Investigations and White Rose Home Packs reviewing the Year.
- 3 – English writing – creative writing. 4 – Spelling and grammar practice.
- 5 – Maths Whizz – access the online system and start using.



You should all have received your login details for Maths-Whizz, the online tutoring system. Login to your accounts, complete the initial assessment and start having fun!!

We are happy to be sent work from the children and to answer questions on the learning and activities we have set. We hope the children are able to access the work with some independence and that it allows them to recall and apply some of their in-school learning.

Don't forget to check the school website and our class page for the next teacher challenge video!!

Please let either of us know if you have any queries.

Best wishes, from Mr Martin and Mr Douglas.



<https://www.purplemash.com/sch/chestertonprimar>

Check the 2Dos section to find set work or choose your own activities.

Year 5 Home Learning Menu

Week beginning 20.07.20

P.E.

Joe Wicks has become the UK's PE teacher.
Go on you tube at 9.00am every day to follow along.

If you do not have access to YouTube, can your child make up their own workout for you and the rest of the family to have a go at?

LO: Select and apply the appropriate batting, running, bowling, throwing and catching techniques. Demonstrate the social skills of fair play.

Pupils at home can try our Confident Cricketer session. This session will look to develop children's key cricket skills as well as supporting social skills through fair play

Please follow the link below for a short video on how to become a 'Confident Cricketer.'

https://www.chancetoshine.org/staying-active-during-the-covid-19-outbreak?utm_source=Portal+Teachers&utm_campaign=3c8f739600

EMAIL_CAMPAIGN_2020_04_24_03_37_COPY_01&utm_medium=email&utm_term=0_b4486fc5f7-3c8f739600-123742013#h_662857567141588602329293

Find instructions for the activity in the appendix below.

CHANCE TO SHINE WEEKLY SESSION: WEEK 7 - CONFIDENT CRICKETER

PARENT & CHILD ACTIVITY



LEARNING OUTCOMES:

Select and apply the appropriate batting, running, bowling, throwing and catching techniques. Demonstrate the social skills of fair play.

EQUIPMENT:

- A cricket bat (or something to strike with)
- 3 balls (or something to hit)
- Markers to place the ball on and run between
- Something to note down the score on



ROCKET FUEL BATTING:

- The bowler should bowls 3 balls to the batter who will strike them into the playing area
- After the third ball is struck, the batter should complete as many runs as possible between the markers, keeping count whilst they do so
- Meanwhile, the bowler should return the three balls to the starting point and shout 'Stop' when they are done

ADAPT THE CHALLENGE:

- Alternate between bowling underarm and overarm
- Add wickets for the bowler to aim at
- Add in a bonus target zone for the batter



LET US KNOW HOW YOU GET ON! SHARE A VIDEO OF YOU COMPLETING THE SESSION ON OUR SOCIAL MEDIA CHANNELS!

CHANCE TO SHINE
Spreading the power of cricket



@chance2shine



@chance_to_shine



/chancetoshinecricket

Weekly Subject Focused Project: ART - Hope



This end to year 5 has been different, strange and given us lots to think about. We would like you to produce a piece of art focusing on the word HOPE.

Think about these questions to produce a painting, sculpture, collage, poster, etc. to show what hope looks like to you.

1. What do you hope school will be like in September?
2. What does hope look like to you?
3. What could you hopes be?

We would love for you to bring these in when you return in September and show Mr. Martin.



Spelling and Grammar

This week we have selected some words from the Year 5 and Year list of statutory spellings.

You can search for the full list online.

**available, awkward, community,
desperate, equipment, guarantee,
interrupt, opportunity, rhythm, temperature**

Use the words to practise your handwriting skills.
A practice sheet for this has been included below.

Turn the words into images to show the meaning.

Try some rainbow writing to show sounds or parts of the word:



Watching or Watching

Grammar Challenges

Prepositions Mini Test

1. Use all of the sentences that contain a preposition.

The children walked across the field.

Jayden wants to stand by trees.

They forget their PE kits and they don't bring their bikes.

Her mum works in an office.

2. Tick the option that shows how the underlined word is used in the sentence.

The flowers grew beside the tree.

As a time preposition:

As a cause preposition:

As a place preposition:

3. Write a sentence using before as a preposition.

Prepositions for place	Prepositions for cause	Prepositions for time

...and so on...

<https://www.bbc.co.uk/bitesize/topics/zw/wp8mn/articles/zw38srd>

Take a look at the above page from BBC bitesize to remind yourselves about prepositions and prepositional phrases.

I always think there's a helpful reminder in the name, because a **preposition** tells you the **position** of something!

Have a go at the questions on the sheet to test your knowledge afterwards.

*The two-page test is included further down this pack.

Reading

Read for at least 15 minutes a day. We hope you will be keen to read for longer. What a great way to pass the time!!

Each day there is a new stimulus, with **reading, writing and grammar challenges** to think about at www.pobble365.com

In your own reading,
think about the areas shown here.

What new words have you found?

**Can you explain what an author means or
what is happening in the story?**

What can you work out from the text?

**Can you find information you have read if
someone asks you a question?**

Vocabulary	Explain
The word/phrase _____ shows that... A synonym for _____ is... The word(s) _____ suggest that the character is feeling... A definition for the word _____ is...	The most interesting/exciting part was... because... I think the text is arranged in this way because... The best structural/literacy feature was ... because... The author engages the reader by...
Infer	Retrieve
The description of (character) shows that they are... The following word(s)/phrase tells the reader that... My overall impression of this text is... because... I can tell that... because... The character behaved in this way because...	The key characters in the text are... The story takes place in a/near to a ... With adult support, consider appropriate responses to: How did...? How often...? How ... <i>is...?</i> Who had...? Who is...? Who did...? What happened to...? What does ... do? Where did ... go?

Writing

How to be successful in Year 5

For the last piece of work I set you in Year 5, I would like you to produce a helpful 'how to...' guide for the children who will be in Hawthorn Class this September as you move to Oak Class.

It might include information on the following things: classroom setup, teachers, play leading, the work, responsibilities, arriving at school in the mornings, or even how to use the shared cloakroom!

I've started a version below to give you an idea. We'd be happy to see your attempts if you want to send them in!

How to... make a success of Year 5.

If you want to do well in Year 5, the first thing to remember is that at least one of the teachers is really bothered about all the little things, like tucking in your chair and making sure each table has the exact amount of white board pens on it at the start and end of each day. Working with two teachers might be tricky, but if you're clever you will quickly work out how to keep both of them happy!

Your days in Year 5 start by entering through the main entrance for the first time. This reminds you that you are nearly the oldest in the school.

Maths

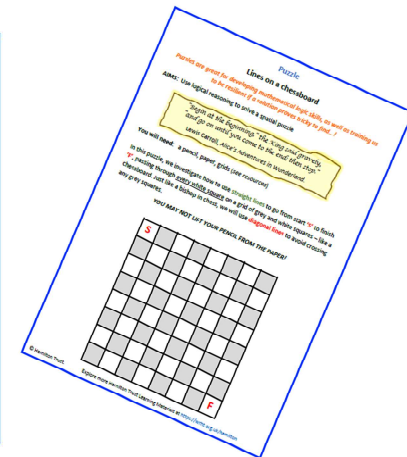
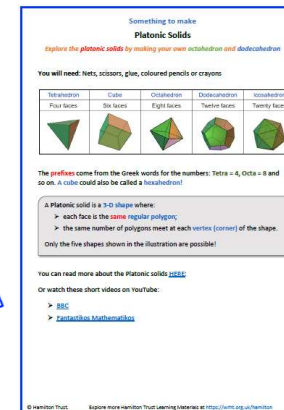
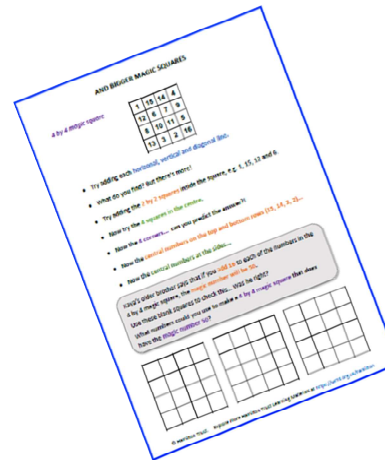
Recap of the year.

During the Summer holidays White Rose have made available a number of topic packs for children to use to cover the areas they have learnt this year. Please feel free to give these a go in preparation for when you move into year 6. Try to complete the Year 5 books and then try any of the Autumn term Year 6 booklets.

<https://whiterosemaths.com/resources/primary-resources/parent-workbooks/>

Daily lessons – Summer Week 8

For the final 3 days I have set you some Maths Puzzles and investigations to try. Please find all of the investigations in the appendix and have fun trying to solve these!!!



Additional Suggested Activities

<https://www.thenational.academy/> - for lessons in each primary subject.

<https://www.bbc.co.uk/bitesize/> - navigate to 'primary' or access the daily core subject (English and Maths) lessons available.

<https://timestable.pixl.org.uk/Timestables.html> - Children have their own login details. Please let us know if you need these to be supplied.

<https://www.topmarks.co.uk/maths-games/hit-the-button> - Times tables, number bonds and more. Great for daily practice.

<https://thirdspacelearning.com/blog/ks2-holiday-maths-pack-free-end-term-activity-resource-pack-parents-carers/> - For summer maths activities.

<https://www.cambslearntogether.co.uk/school-improvement/english-and-maths/documents> - For English and maths activities for all year groups.

APPENDIX

Maths Investigations

Day 1

Mathematical investigation (1)

Investigating is a great way to learn to think mathematically, apply logic, spot patterns and improve our perseverance.

Magic Squares

AIM: To investigate properties of 'magic' squares.

You will need: Some paper for jotting and trying out ideas, a pencil

What is a magic square?

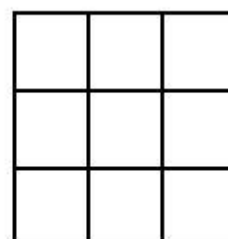
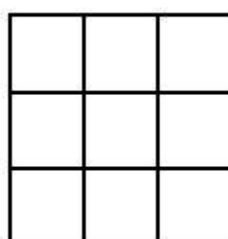
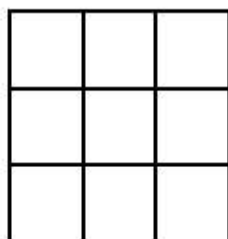
8	1	6
3	5	7
4	9	2

Try **adding** the **three numbers** on each **horizontal**, each **vertical** and each **diagonal** line, e.g. $8 + 1 + 6$ across the top horizontal line or $4 + 5 + 6$ diagonally from the bottom left to the top right. What do you notice?

Now try re-arranging the numbers 1-9 in these squares to discover some more 'magic' squares that give the same result. You could start by swapping around the numbers in the corners or at the sides...

You can also try this and some of the other magic square puzzles online:

https://www.transum.org/software/SW/magic_square/magic_square.asp



Recap...

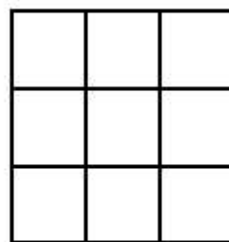
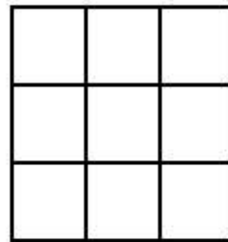
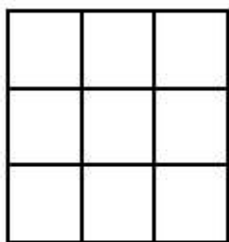
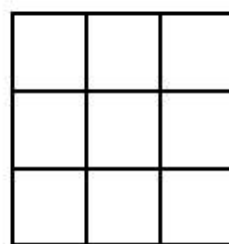
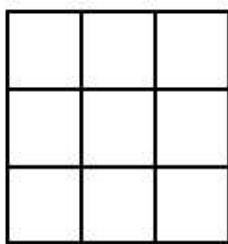
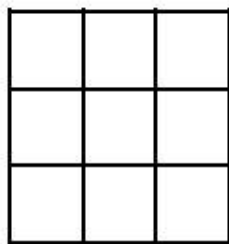
You should have found some other ways of arranging the numbers...

- What do the **3 numbers always add to?**
- What number is always in the **centre?**
- What is the **connection** between the numbers?

Now take the original magic square, and try these puzzles. For each puzzle make a **prediction** before trying it out:

- What happens if you **double each number** in the square?
- What happens if you **add 3 to each number** in the square?
- What happens if you **subtract 1 from each number** in the square?

In each case, what is the relationship between the number in the centre and the total for each line?



Now let's make our own magic square.

This one has 7 in the centre, so can you **predict** what each line should add up to?!

You need to choose values for the square and for the triangle then solve the equations to make this square work!

Choose **different numbers** for the **square** and **triangle**, then find the number in each place... $\square = \underline{\quad}$ $\triangle = \underline{\quad}$

$7 - \square$	$7 + \square - \triangle$	$7 + \triangle$
$7 + \square + \triangle$	7	$7 - \square - \triangle$
$7 - \triangle$	$7 - \square + \triangle$	$7 + \square$

So, the numbers in the Magic Square are special, but why are they called magic? From ancient times, it seems that they were connected with the supernatural and magical world. The earliest record of magic squares is from China in about 2200 BCE and is called **Lo-Shu**. There's a legend that says that the Emperor Yu saw this magic square on the back of a divine tortoise in the Yellow River!

You can read more about the history of magic squares [HERE](#).

AND BIGGER MAGIC SQUARES

4 by 4 magic square

1	15	14	4
12	6	7	9
8	10	11	5
13	3	2	16

- Try adding each **horizontal, vertical and diagonal line**.
- What do you find? But there's more!
- Try adding the **2 by 2 squares** inside the square, e.g. 1, 15, 12 and 6.
- Now try the **4 squares in the centre**.
- Now the **4 corners...** can you predict the answer?!
- Now the **central numbers on the top and bottom rows (15, 14, 2, 2)...**
- Now the **central numbers at the sides...**

Kaya's older brother says that if you **add 16** to each of the numbers in the 4 by 4 magic square, the **magic number will be 50**.

Use these blank squares to check this... Was he right?

What numbers could you use to make a **4 by 4 magic square** that **does** have the **magic number 50**?

Something to make

Platonic Solids

Explore the *platonic solids* by making your own *octahedron* and *dodecahedron*

You will need: Nets, scissors, glue, coloured pencils or crayons

Tetrahedron	Cube	Octahedron	Dodecahedron	Icosahedron
Four faces	Six faces	Eight faces	Twelve faces	Twenty faces
				

The **prefixes** come from the Greek words for the numbers: **Tetra = 4**, **Octa = 8** and so on. A **cube** could also be called a **hexahedron!**

A **Platonic** solid is a **3-D shape** where:

- each face is the **same regular polygon**;
- the same number of polygons meet at each **vertex (corner)** of the shape.

Only the five shapes shown in the illustration are possible!

You can read more about the Platonic solids [HERE](#):

Or watch these short videos on YouTube:

- [BBC](#)
- [Fantastikos Mathematikos](#)

Making platonic solids

We are going to use the nets on the next pages to make our own **octahedron** and **dodecahedron**!

Construction Tips

If possible, print these templates on card or thick paper. They can also be printed on normal paper, they just may be a bit 'floppy'.

Print them twice – it usually takes two tries to get the folding and gluing right!

After cutting out the shapes, you need to fold neatly along the dashed lines.

To make folding easier with card, you can *score* along the lines before folding.

After folding, carefully glue the tabs one at a time.

Octahedron challenge

Colour each of the triangles before folding: Use one colour for each triangle, so that when you fold up the **octahedron** alternate faces are always a different colour.

What is the **minimum** number of colours you need?

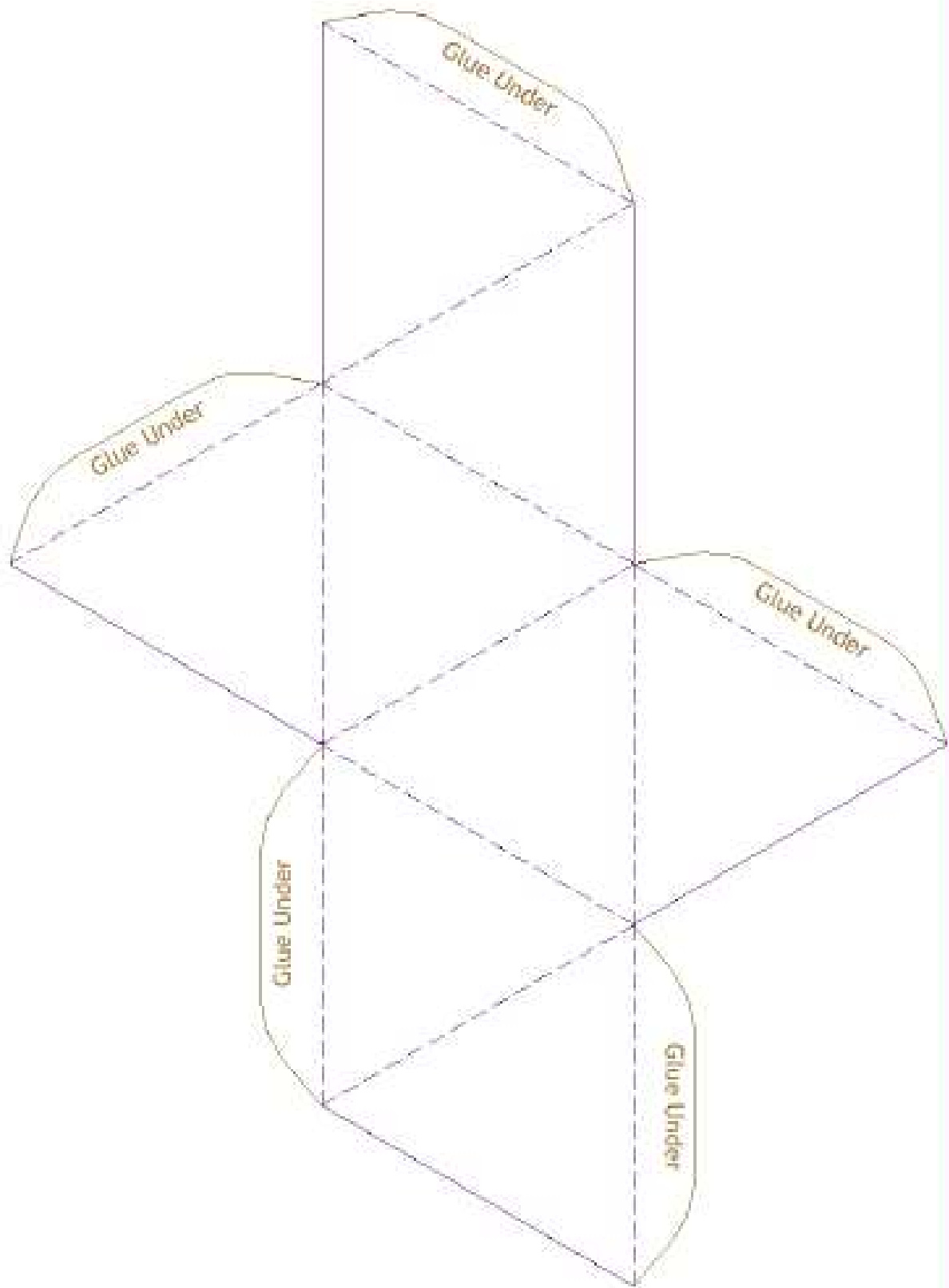
Dodecahedron challenge

Colour each of the pentagons before folding.

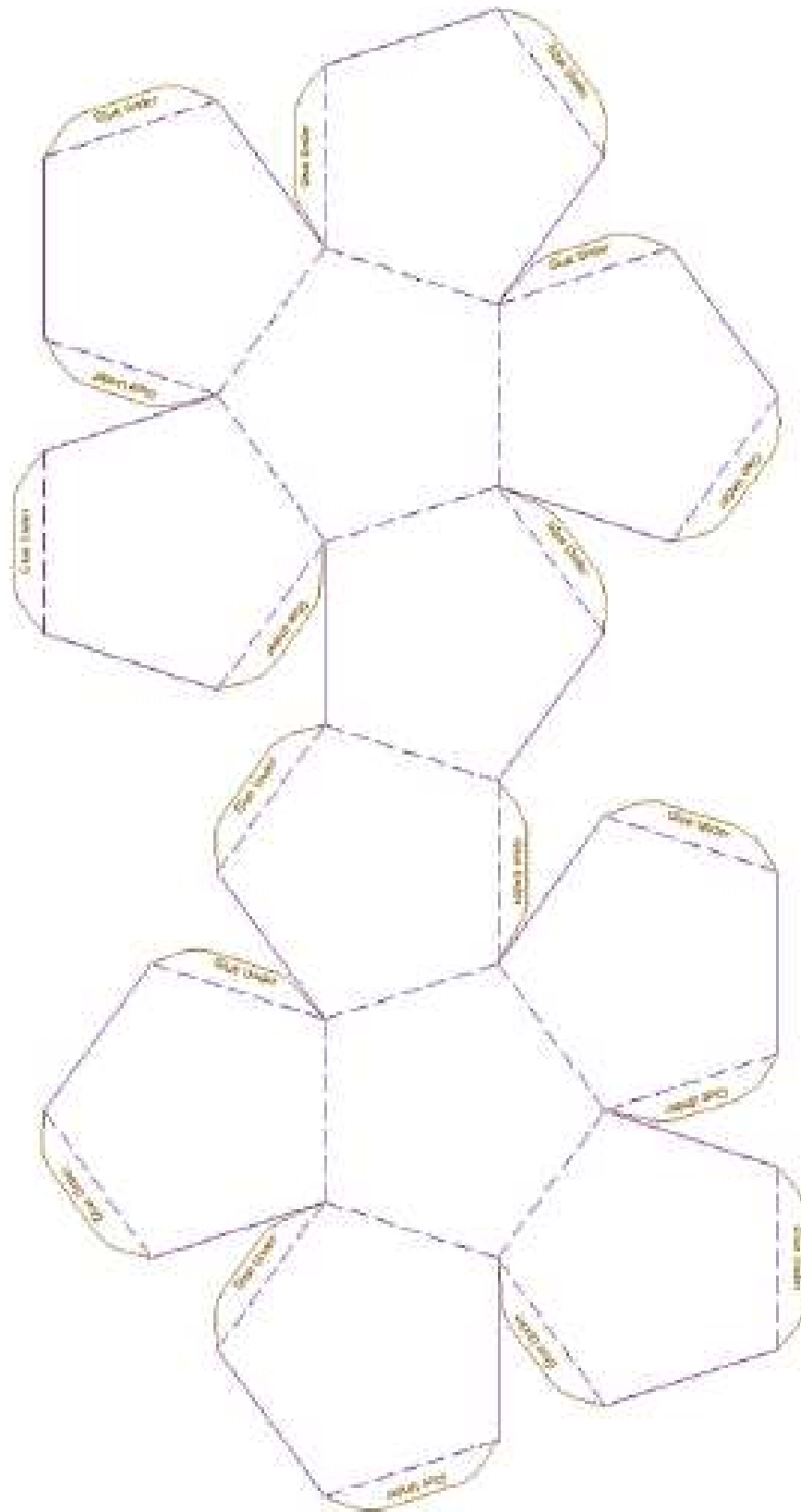
What is the **minimum** number of colours you will need so that, when folded up, no two adjacent faces are the same colour?

If you get stuck with these puzzles, you can read about them and find solutions from nrich.maths.org [HERE](#).

Octahedron net



Dodecahedron net



Day 3

Puzzle

Lines on a chessboard

Puzzles are great for developing mathematical logic skills, as well as training us to be resilient if a solution proves tricky to find...!

AIMS: Use logical reasoning to solve a spatial puzzle

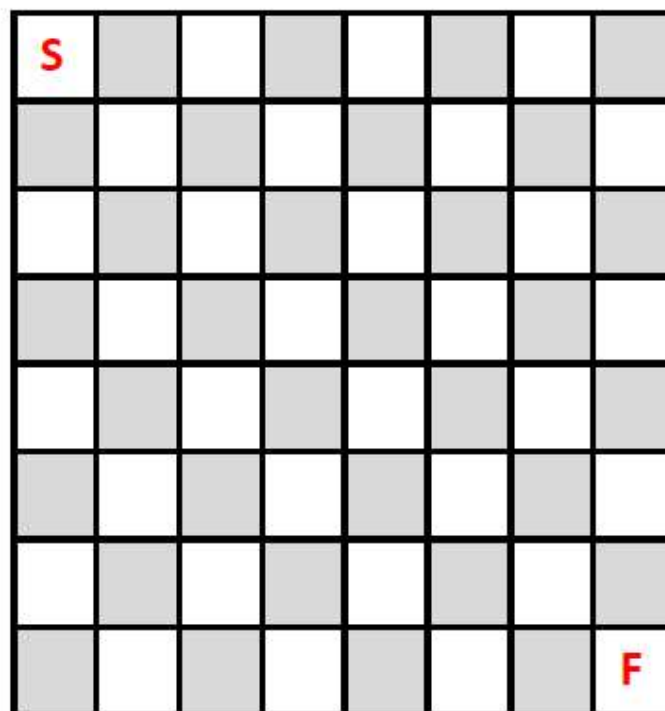
*"Begin at the beginning," the King said gravely,
"and go on until you come to the end; then stop."*

Lewis Carroll, *Alice's Adventures in Wonderland*.

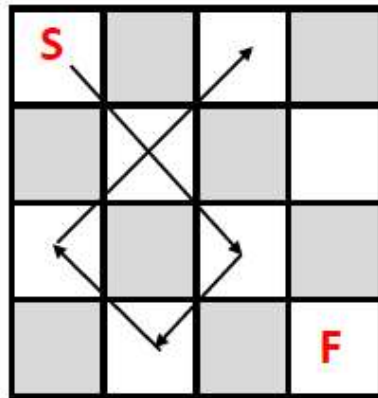
You will need: a pencil, paper, grids (see resources)

In this puzzle, we investigate how to use **straight lines** to go from start '**S**' to finish '**F**', passing through every white square on a grid of grey and white squares – like a chessboard. Just like a bishop in chess, we will use **diagonal lines** to avoid crossing any grey squares.

YOU MAY NOT LIFT YOUR PENCIL FROM THE PAPER!



A helpful problem-solving strategy is to try a **simpler problem first**, so learn how to start the problem with a **4 by 4 square**.



Remember that you may not lift your pencil from the page!

We could start by drawing a line directly from S to F, but we would then have to go back before we could travel to the other white squares. We definitely want to avoid this! So, instead follow these moves:

Move 1: Start by going down and right 2 squares.

Move 2: Turn and go down and left by 1 square.

Move 3: Turn and go up and left by 1 square.

Move 4: Turn and go up and right by 2 squares.

How many more moves to get to the **finish**? How many was that **in total**?

Do you think that you can beat that? Use the grids on the resource page to try out your ideas.

- Now try on the **5 by 5 grids**. What happens with these? UGH! You have to backtrack! There is no way to avoid this problem! Can you see why not?
- Now try on the **6 by 6 grids**.
- Now you are ready for the **chessboard challenge!** Look at your solutions for 4 by 4 and 6 by 6... Maybe you can use some of the patterns from those solutions to help?!
- If you get stuck, have a look at the solutions page and try and reproduce the examples before trying again.

Resource
4 by 4 grids

S			
			F

S			
			F

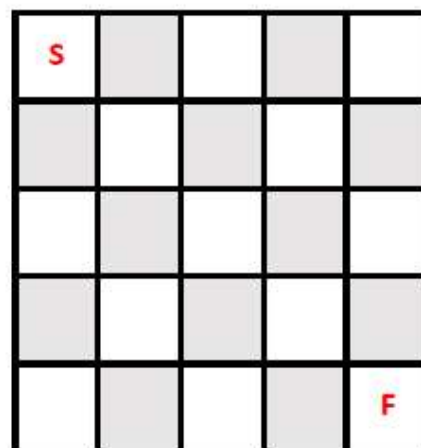
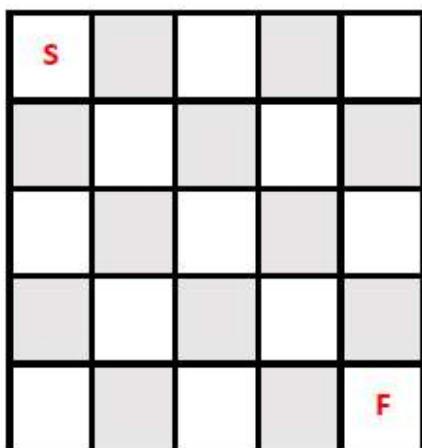
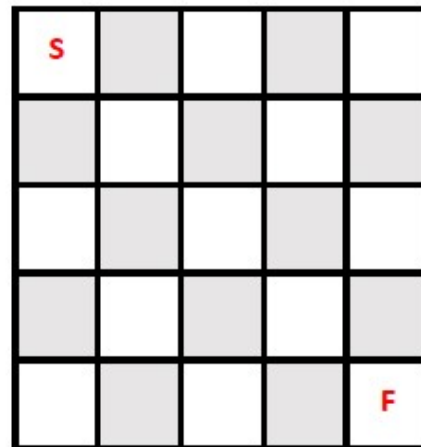
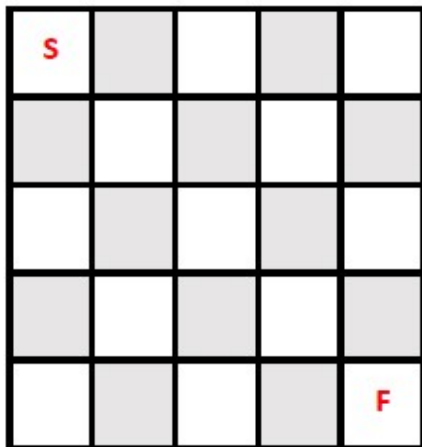
S			
			F

S			
			F

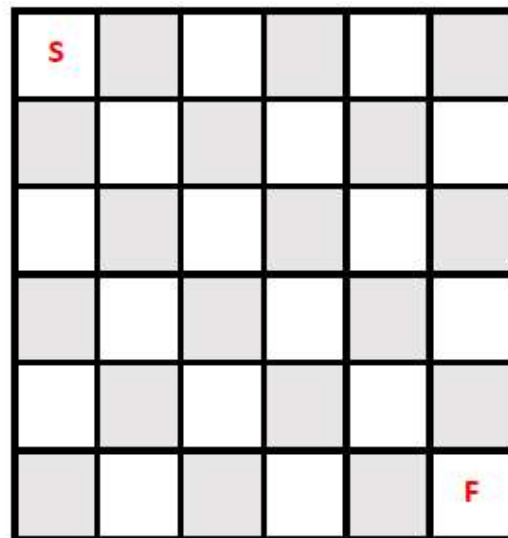
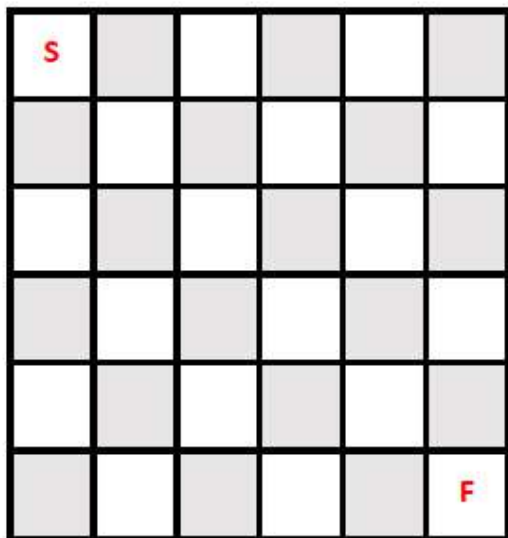
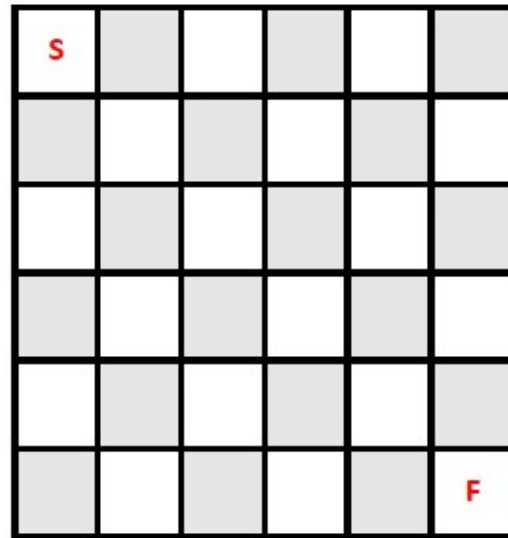
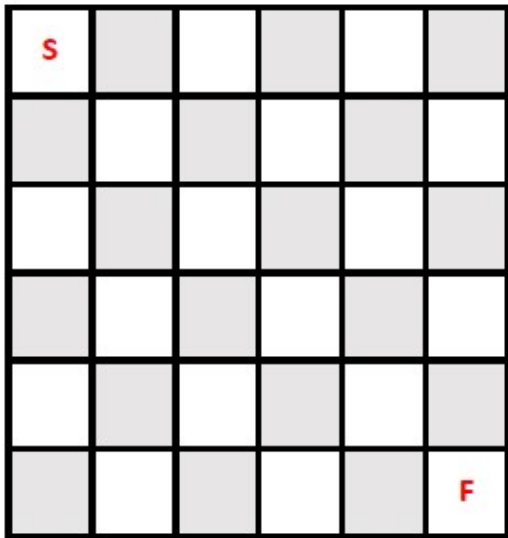
S			
			F

S			
			F

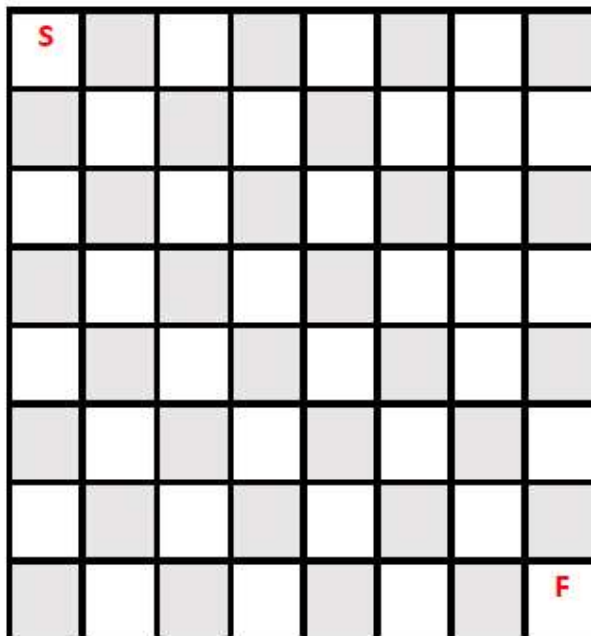
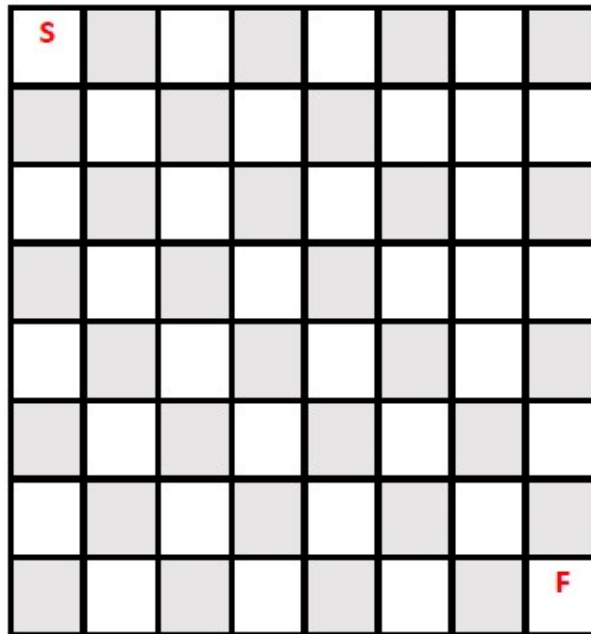
Resource
5 by 5 grids



Resource
6 by 6 grids



Resource
8 by 8 grids

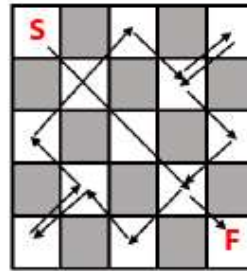
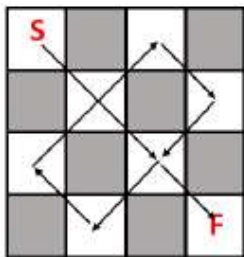


ANSWERS – Day 3

Solutions

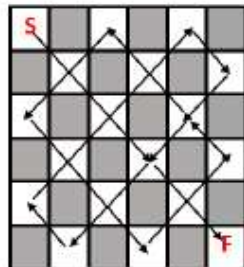
Note – there are many different solutions - you may have a different one.

4 by 4: This solution has 7 lines.

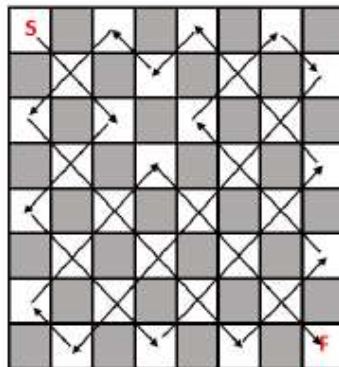


5 by 5: This solution has 13 lines. With an odd number, it is impossible to avoid going back over a line since the white corner squares have only one route in and out.

6 by 6: This solution has 13 lines.



8 by 8: This solution has 17 lines.



Name:

Date:

5
total marks

Prepositions Mini Test

1. Tick **all** of the sentences that contain a **preposition**.

The children walked across the field.

Jayden wants to stand by Emma.

They forget their PE kits and they don't bring their letters.

Her mum works in an office.

1 mark

2. Tick the option that shows how the underlined word is used in the sentence.

The flowers grew beside the tree.

As a time preposition

As a cause preposition.

As a clause preposition.

As a place preposition.

1 mark

3. Write a sentence using **before** as a preposition.

1 mark

total for
this page

4. Explain how to get into your classroom using **three or more different** prepositions.

1 mark

5. Put the prepositions in the table.

1 mark

thanks to	because of	under	on Wednesday
through	at 2 o'clock	in spring	next to

Prepositions for place	Prepositions for cause	Prepositions for time

••END OF TEST••

total for this page

Year 5 spellings - Monday 20th July 2020.

These words all taken from statutory spellings lists for Key Stage 2.

Practise the formation of the words, learn the spellings and discuss the meaning of any new words with your family members.

Look

Trace

Copy

available

available

awkward

awkward

community

community

desperate

desperate

equipment

equipment

guarantee

guarantee

interrupt

interrupt

opportunity

opportunity

rhythm

rhythm

temperature

temperature