Teacher notes

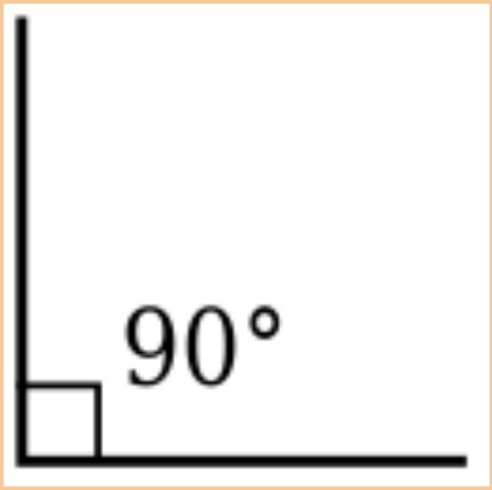
No Nasty Maths this week as the first 2 lessons are hands on which all children will benefit from completing.

Please photgraph children working with right angles to stick into their books for the first lesson

WALTS are at the top of the first reasoning question.

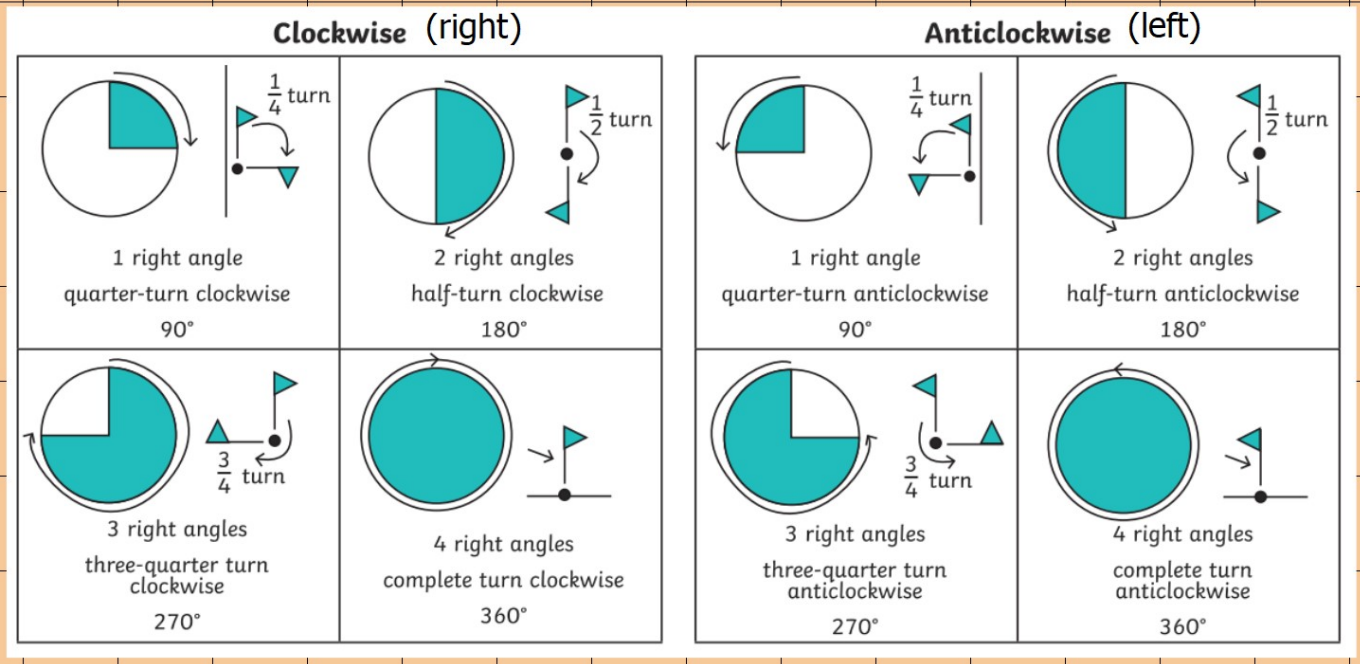
WALT: Identify a right angle

A right angle is the amount of turn between 2 lines.



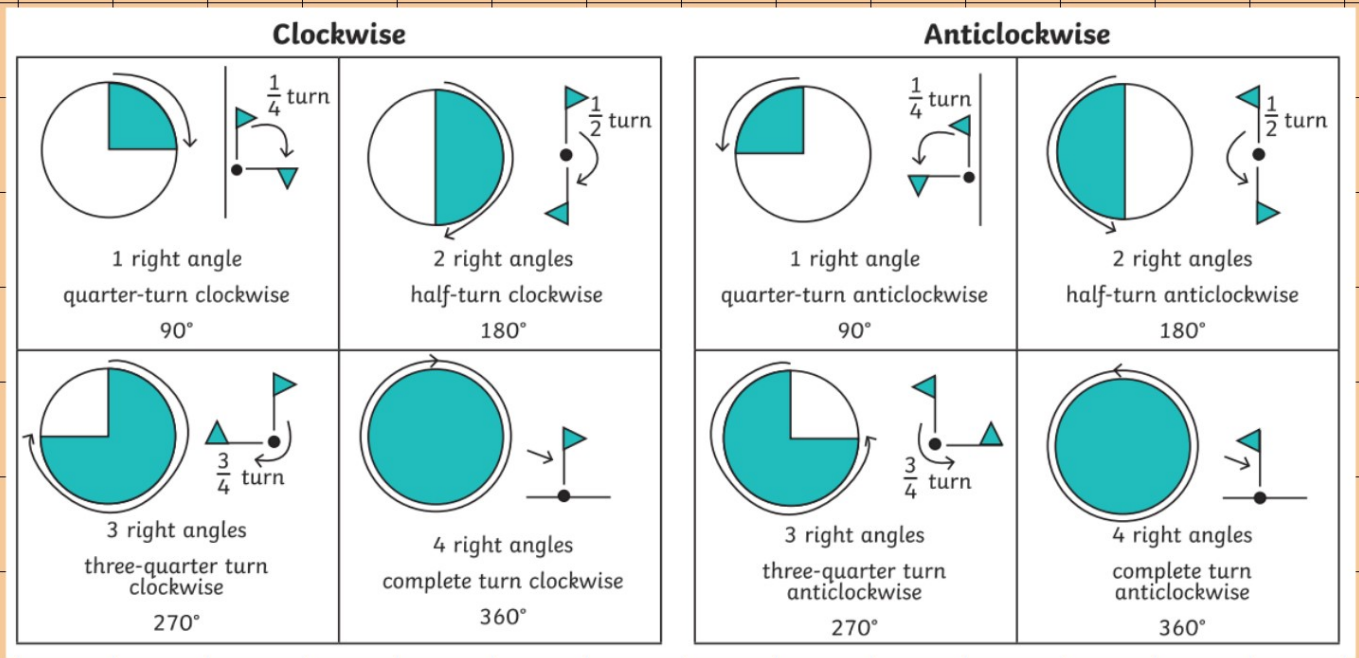
It is equal to 90 degrees.

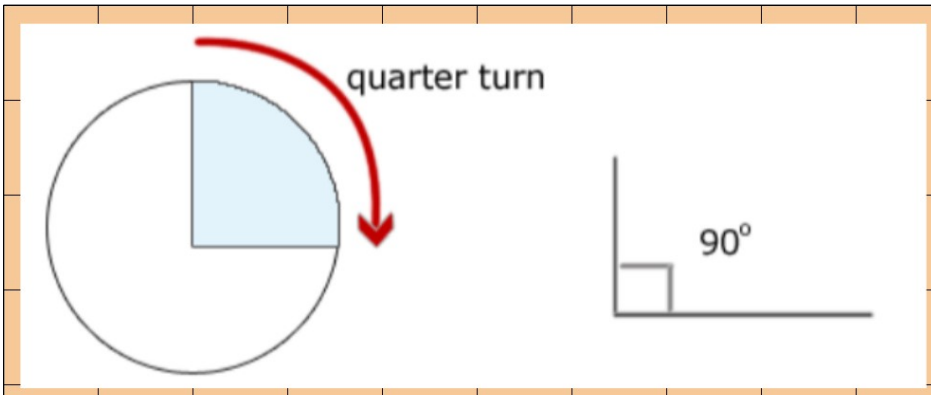
Follow my instructions!

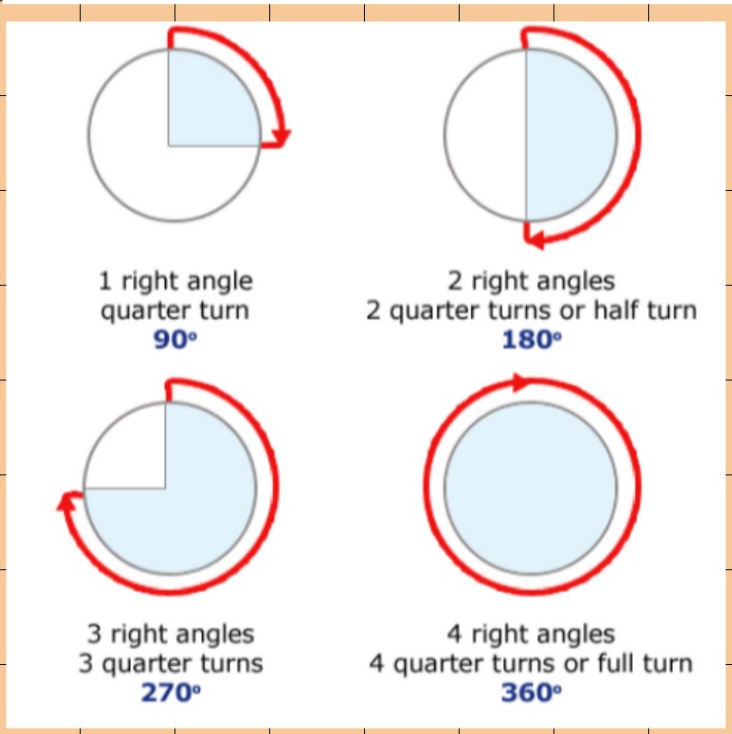


In your pairs, choose 2 turns to complete.

We will try and identify the turns you complete.







Watch the turns

I do on the whiteboard

and tell me:

How many quarter turns

What direction?

Look at the right angles I am about to make

Which is the bigger right angle?

Look around the classroom and see if you can spot as many right angles as possible.

We will check the right angles together at the end.

2 house points for each correct answer.

Now let's reason....

For each reasoning question, make sure you have expalined your answer clearly.

I need 2 volunteers.....

Agree or Disagree?

Tim and Sam were looking forwards.

Tim does two quarter turns clockwise. Sam does one half turn anticlockwise.

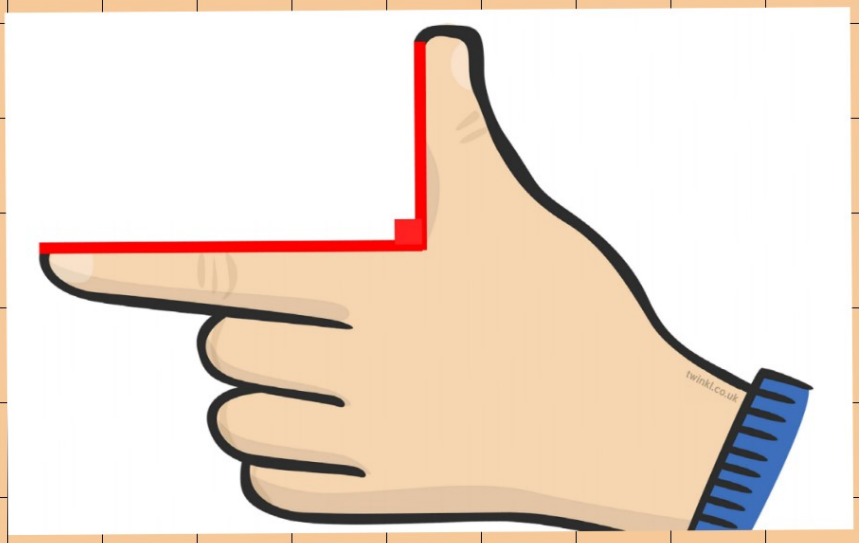
Tim and Sam are still looking in the same direction as each other

WALT: Find right angles in shapes

WALT: Identify if an angle is bigger or smaller than a right angle

I do, we do, you do

Let's see how to find right angles.
Also, how to check if an angle is bigger or smaller than a right angle.

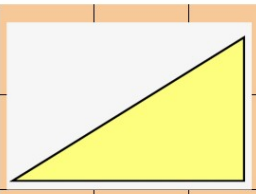


Look at the 2-D shapes on your desk.

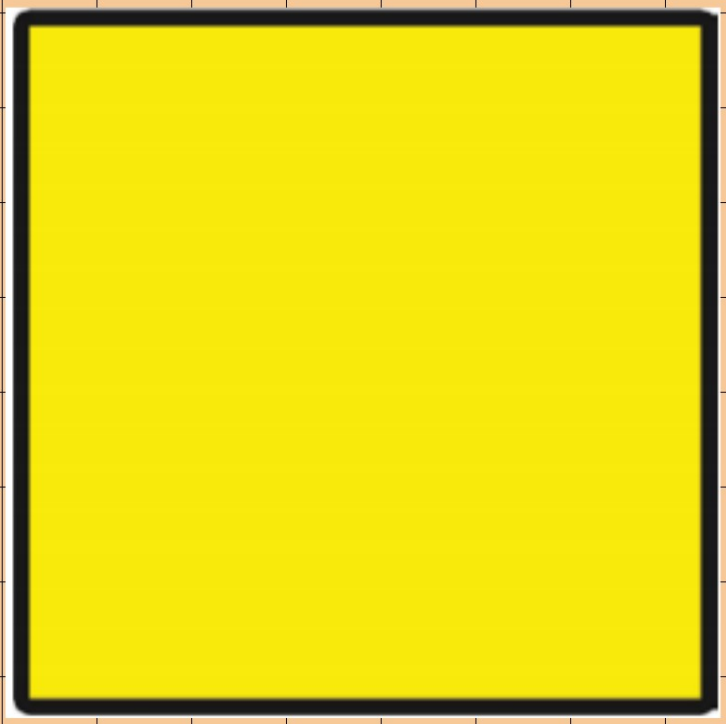
Use the right angle finder to find all the right angles in the shapes.

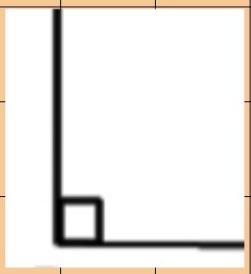
Complete your table as you go

Shape	Number of right angles	Number of angles bigger than a right angle	Number of angles smaller than a right angle
Triangle	1	0	2

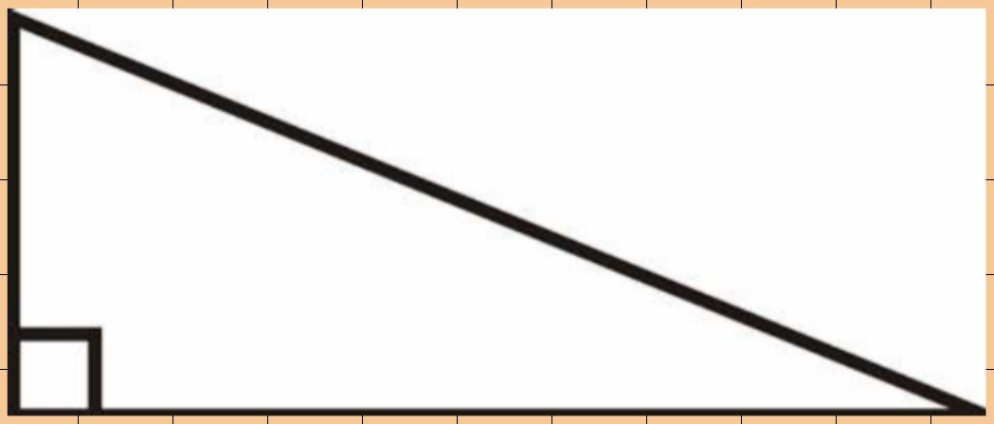


This is how we mark a right angle on a shape.





Find the right angles on the cardboard shapes and mark them on.



Then move onto reasoning

Plenary

Let's look at our completed tables.

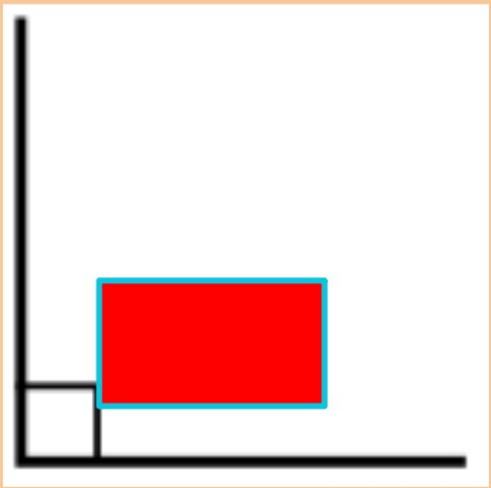
What shapes have only right angles?

Why do you think this is?

WALT: Use right angles as degrees of a turn

Recap

A right angle is the amount of [redacted] between 2 lines.



It is equal to [redacted] degrees.

Right angles can be used as directions.

We can say how many turns we want something to do to direct it towards something.

Follow my instructions and tell me what you are facing afterwards.

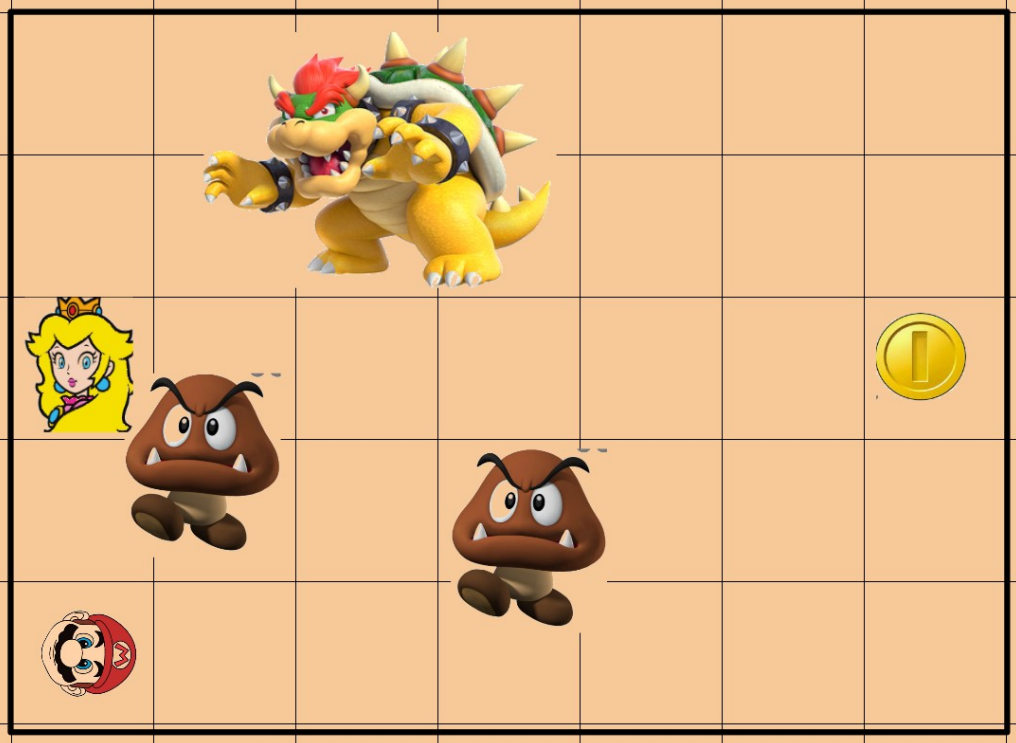
I need a volunteer!

Listen to where I want them to face!

It's up to you to give instructions so they end up facing the correct way!

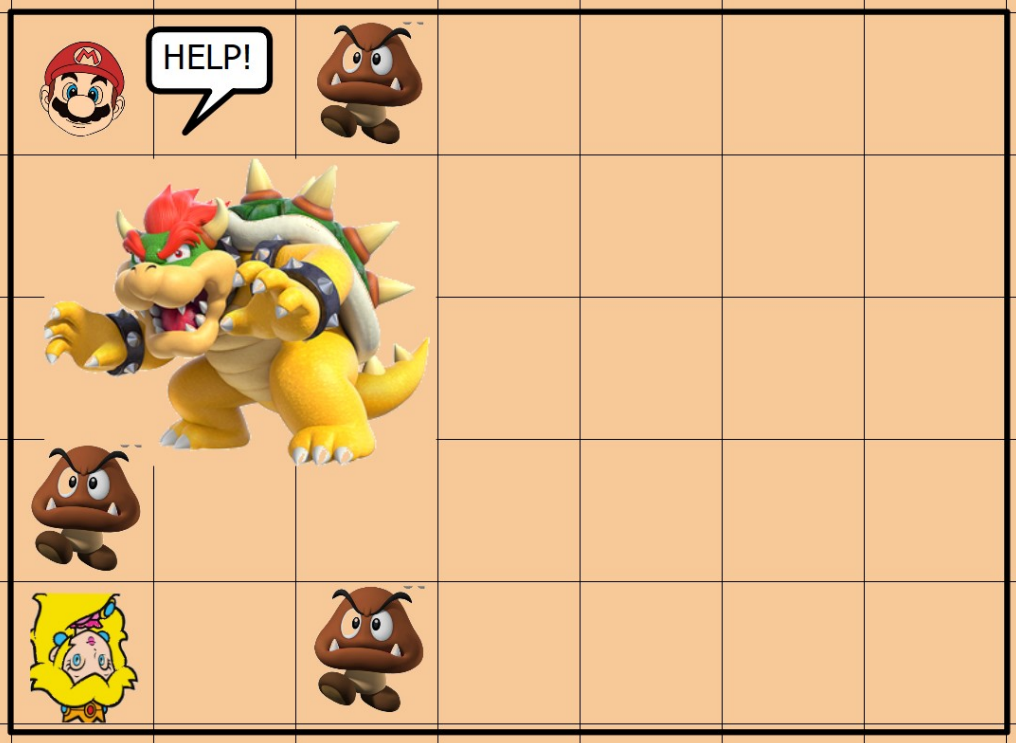
I do - Get the coin!

We do - Is Mario facing the right way?



Once you have the coin, turn to face Princess Peach

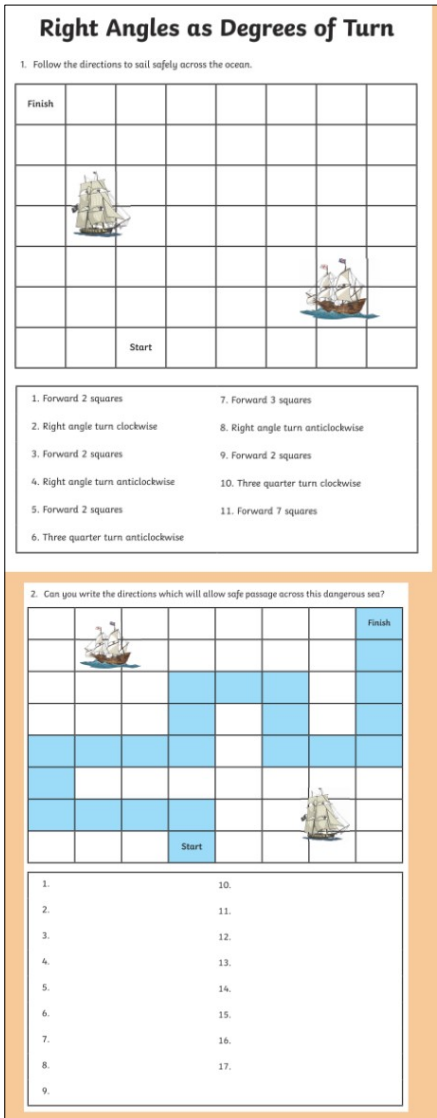
You do - Peach to the rescue!



Mario is stuck! Sneak up behind Bowser so he can escape! You must be facing Bowser's tail so you can grab it to move him out of the way!

How to make your own game We do

1. Pick a start and finish point.
2. Put obstacles in the way.
3. Write instruction for your partner to follow OR ask you partner to record a route to safety!



Right Angles as Degrees of Turn

1. Follow the directions to sail safely across the ocean.

Finish

Start

1. Forward 2 squares	7. Forward 3 squares
2. Right angle turn clockwise	8. Right angle turn anticlockwise
3. Forward 2 squares	9. Forward 2 squares
4. Right angle turn anticlockwise	10. Three quarter turn clockwise
5. Forward 2 squares	11. Forward 7 squares
6. Three quarter turn anticlockwise	

2. Can you write the directions which will allow safe passage across this dangerous sea?

Finish

Start

1.	10.
2.	11.
3.	12.
4.	13.
5.	14.
6.	15.
7.	16.
8.	17.
9.	

Follow the directions to map a safe path!

Then, write the directions of the blue path.

Finally, create your own game for your partner to solve!

Pick a start and finish point.
Place obstacles for them to avoid.
Ask them to follow or create the directions.