

# Week Five

## Your research

It's time for you to become a researcher! Now that you've looked at questions in Science, English and Maths, you might have an idea of what research you might be interested in doing yourself.

**You have to make sure you do your research carefully so that you get accurate results. Follow the steps below to start doing your very own research project!**



- 1. Decide which area interests you**

Which week have you enjoyed most so far? Did any of the research questions really interest you? Maybe you were inspired or could imagine yourself doing the research!

- 2. Come up with a question which you can try to answer**

What are you most interested in finding out about? Have a think about what you could investigate whilst you're at home. What can you do with what you already have at home?

- 3. Do some background research**

What information do you need to carry out the research? Write a list of at least 5 questions that you want to ask before you start your research. Make sure you make a note of where you find the answers!

- 4. Predict what you think the answer will be**

Once you've done your background reading, you should be able to make a hypothesis. This means a prediction of what you think the answer to your question will be. Have a think about what you expect the answer to be based on your background research - it doesn't matter if you're right or wrong!

- 5. Plan how you will do the research**

Now you can start to plan your research! Think about all the things you might need to carry out your research, including any equipment. How will you measure your results? How can you make sure the research is fair?

- 6. Collect your data!**

Think about how you're going to collect your data. You will probably need some kind of table - how will that look? You might find that you come across something you weren't expecting whilst you are carrying out your research, so make sure you make room to record this too!

Here are some examples to get you going! Have a careful look at them to make sure what you will need to do at each step.

### Example one

1. Decide which area interests you	<b>Science</b>		
2. Come up with a question which you can try to answer	Which windowsill is the best for growing cress?		
3. Do some background research	<ol style="list-style-type: none"> <li>1. How fast does cress grow?</li> <li>2. Does cress grow in the dark?</li> <li>3. Why would the amount of light change how quickly it grows?</li> <li>4. How much water does cress need to grow?</li> <li>5. Why can cress grow without soil?</li> </ol>		
4. Predict what you think the answer will be	I think that the windowsill in the kitchen will be best because it's the biggest window.		
5. Plan how you will do the research	<p><b>I will need:</b></p> <ul style="list-style-type: none"> <li>• Cress seeds</li> <li>• 2 containers</li> <li>• Kitchen roll</li> <li>• Water</li> <li>• Ruler to measure</li> <li>• Paper</li> <li>• Pen</li> </ul> <p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. Take 2 empty food containers and put a layer of kitchen roll in the bottom.</li> <li>2. Sprinkle the kitchen roll with water until damp.</li> <li>3. Sprinkle 1/2 cress seeds in each container.</li> <li>4. Place on windowsills in kitchen and bedroom.</li> <li>5. Measure and take notes on the cress seeds every day for one week. Check that the kitchen roll is still damp.</li> </ol>		
6. Collect your data!			
<b>Day/Room</b>	<b>Bedroom</b>	<b>Kitchen</b>	<b>Any other observations</b>
1			
2			
3			
4			
5			
6			
7			



## Example two

<b>1. Decide which area interests you</b>	<b>English</b>		
<b>2. Come up with a question which you can try to answer</b>	How many characters in children’s books are boys and how many are girls?		
<b>3. Do some background research</b>	<ol style="list-style-type: none"> <li>1. How many characters do different children’s books have?</li> <li>2. How many people in the world are girls and how many are boys?</li> <li>3. Do girls get bought more books with girls in and boys more books with boys in?</li> <li>4. How many people in the world are girls and how many are boys?</li> <li>5. Do girls get bought more books with girls in and boys more books with boys in?</li> </ol>		
<b>4. Predict what you think the answer will be</b>	I think that there will be the same amount of boys and girls in books because there are the same amount of boys and girls in the world.		
<b>5. Plan how you will do the research</b>	<p><b>I will need:</b></p> <ul style="list-style-type: none"> <li>• All of my books</li> <li>• Paper</li> <li>• Pen</li> </ul> <p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>1. For the first book, write down all the characters.</li> <li>2. Next to each character, write down whether they are a boy or a girl.</li> <li>3. Count how many boys and how many girls are in the book.</li> <li>4. Repeat for the next book.</li> </ol>		
<b>6. Collect your data!</b>			
	<b>No. Boys</b>	<b>No. Girls</b>	<b>Any other observations</b>
<b>Book 1</b>			
<b>Book 2</b>			
<b>Book 3</b>			
<b>Book 4</b>			



### Example three

1. Decide which area interests you	<b>Maths</b>		
2. Come up with a question which you can try to answer	Is it better to start first or second in a game of noughts and crosses?		
3. Do some background research	<ol style="list-style-type: none"> <li>How long does a game last?</li> <li>Which is the best square to start in?</li> <li>Does it matter who you're playing with?</li> <li>How many turns do I get before the game ends?</li> <li>How many different ways can I win?</li> </ol>		
4. Predict what you think the answer will be	I think it will be better to start second because then you can tell where the other person is planning to go.		
5. Plan how you will do the research	<p><b>I will need:</b></p> <ul style="list-style-type: none"> <li>Paper</li> <li>Pen</li> </ul> <p><b>Steps:</b></p> <ol style="list-style-type: none"> <li>Find an opponent to play with.</li> <li>Play 5 games of noughts and crosses with me going first</li> <li>Write down for each game whether I won.</li> <li>Play 5 games of noughts and crosses with me going second</li> <li>Write down for each game whether I won.</li> </ol>		
6. Collect your data!			
	<b>Game</b>	<b>Play first</b>	<b>Play second</b>
	1		<b>Any other observations</b>
	2		
	3		
	4		
	5		



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