





<p>1) Create a poster about <b>electricity</b>. It can be about the different types of power sources that make electricity or about what makes electricity work. Make it colourful and informative!</p>	<p>3) Can you think of a word for each letter of the alphabet? All the words need to be based on <b>electricity</b>.</p> 	<p>5) What is your favourite <b>electrical item</b> and why? Write a paragraph to explain your choice. Try to include conjunctions in your writing. (For, And, Nor, But, Or, So)</p>	<p>7) Design a new <b>electrical gadget</b>. Remember to use annotations to explain its features. Be as inventive as you can!</p>	<p>9) Complete a <b>magic V</b> to explore two numbers that make the same total.</p>	<p>11) Draw or paint a picture inspired by the power of <b>electricity</b>.</p>
<p>2) Design a fact file on an <b>electrical item</b> of your choice. It can be something you've invented that doesn't exist yet.</p> 	<p>4) Design a PE or Dance lesson that makes you move as fast as <b>electricity</b>.</p>	<p>6) Have a go at dicey addition. Can you score 100?</p>	<p>8) Make a list of 6 different objects in your house that use <b>electricity</b>. Why do they need the electricity? (e.g. create light, heat or moving parts) Some will have <u>more than one</u> need!</p>	<p>10) Create a safety poster about the dangers of <b>electricity</b>.</p>	<p>12) Surprise us with anything you can think of that has something to do with <b>electricity</b>.</p>

One piece of learning challenge homework must be completed each week ready to be handed in each **MONDAY**. If you would like some resources or ideas to help with your projects, please let your class teacher know. You only need to do one of every week.

Also remember to:

- Practise your times tables on TT Rockstars
- Practise your spellings – There will be a test every Friday morning
- Read at least 3x a week.



## Dicey Addition

Find a partner and a 0-9 dice.

### Game 1

Each of you draw an addition grid like this:

		+			=	
--	--	---	--	--	---	--

Take turns to throw the dice. After each throw of the dice, you each decide which of your cells to put that number in.

Throw the dice four times until all the cells are full.

*Whoever has the sum closer to 100 wins.*

There are two possible scoring systems:

- A point for a win. The first person to reach 10 wins the game.
- Each player keeps a running total of their "penalty points", the difference between their result and 100 after each round. First to 500 loses.

You can vary the target to make it easier or more difficult.

### Game 2

Each of you draw an addition grid like this:

		+			=	
--	--	---	--	--	---	--

Take turns to throw the dice, until it has been thrown four times in total. After you have collected all four numbers, each player must decide where to place them on his/her own grid.

**Whoever has the sum closer to 100 wins.**

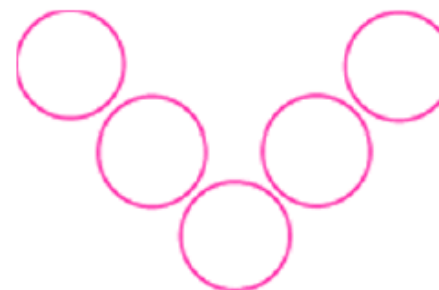
There are two possible scoring systems:

A point for a win. The first person to reach 10 wins the game.  
 Each player keeps a running total of their "penalty points", the difference between their result and 100 after each round. First to 500 loses.  
 You can vary the target to make it easier or more difficult.



## Magic Vs

Place each of the numbers 1 to 5 in the V shape below so that the two arms of the V have the same total.



When the two arms of the V have the same total, we'll call it a 'magic V'. We'll call the total of the three numbers in an arm of a magic V the 'magic total'.

What is the magic total of each 'arm' in your magic V?  
 How many other magic Vs can you find with that same magic total?  
 How do you know you've got them all?

We will assume that if two or more magic Vs have the **same magic total**, they are the **same magic V**.  
 Can you arrange the numbers 1-5 to make any magic Vs with **different magic totals**?

What do you notice about all the solutions you find?  
 Can you explain what you notice?

Can you convince someone that you have all the solutions?

What happens if we use the numbers from 2 to 6?  
 Can you explain what you notice this time?