

# Half Term Activity Pack

Adventures in...

Maths is simply everywhere and adventures at home or out and about during half term can encourage young explorers to engage with numbers in the real world. In this pack you will find some ideas for fun activities to enjoy together that will also cultivate your child's maths skills.

The adventures in this pack are divided into ideas for outdoor expeditions and ways to make the most of rainy days indoors. From activities to enjoy on an autumnal walk to recipes for baking at home, there are lots of easy ways for young adventurers to engage with numbers without even realising they are doing maths.



OXFORD



# What's inside

Discover numbers outside Age 5–7
Fun maths activities at home Age 5–74
Unearth hidden numbers in the great outdoors Age 8–11
Adventures in maths to enjoy at home Age 8–11
Worksheets and

### How this Activity Pack works

• Pages 3–4: activities for younger adventurers aged 5–7

further resources......8

• Pages 5–7: ideas for older explorers aged 8–11.

Each section offers suggestions and guidance to make the most of each adventure, as well as the 'secret skills' developed in each activity such as number and place value, geometry and shapes, measurement, telling the time, addition and subtraction, or multiplication and division.

You don't need to work through this pack in order, you can take a look through and see what inspires you. There's suggestions for outside fun, when the weather allows, as well as great ideas for days spent indoors. You will also find two worksheets, one for each age group, at the end of the pack.

兴

Ready for an adventure?





# Discover humbers outside age 5-7

Make the most of the great outdoors this half term in the garden, at the park, or out on a walk. These activities encourage young adventurers to uncover a secret world of numbers, including addition and subtraction, multiplication and division, measurement, counting, shapes, and time.

#### In the garden

Gardening offers plenty of opportunities to practise problem solving using all the four operations used in maths at primary school (addition, subtraction, multiplication, and division). For example, ask your child to work out how many seeds or seedlings can be planted in a particular tray or flowerbed, or how much soil they will need to fill a certain container. Children could try measuring distances in the garden by counting paces. Are the results always the same? What if you use something that doesn't change length, like a stick?

+-×÷ **SECRET SKILLS:** addition and subtraction; multiplication and division; measurement



### **Discovery walks**

KK KK

> When taking a walk, ask adventurers to look out for and keep count of how many birds they can see.

> You can also encourage children to collect autumn treasures on your walk. Stick a few strips of doublesided tape across a piece of cardboard, leaving the backing on. An old piece of cereal box works well. Next time you're on a walk, they'll have a place to stick the natural objects they find.

You could challenge them to hunt for leaves, feathers, petals, or seeds. (Remember not to pick wild flowers). They might choose to sort the objects as they go, grouping them by colour, shape, or pattern.

Back at home talk about the colours and shapes they've spotted, and the groups or patterns they've created. It's a great way to practise the skills they'll need in maths. Children can use their artwork for counting games.



**SECRET SKILLS:** number and place value; geometry and shapes

### **Playing sports**

In the garden or at the park, try passing a ball and counting how many times you can pass it before it is dropped. (This can work just as well inside with some balled-up socks — so long as no one is throwing too hard!) Can you beat your score?

Challenge children to complete a certain number of actions in a minute — for example, how many star jumps can they do? — and keep track of their score over several rounds.



**SECRET SKILLS:** number and place value; telling the time



# Fun maths activities at home age 5–7

When the weather is less than perfect, these easy indoor adventures help you to discover shapes, maths words, time, and measurement through play and baking.

#### What's in the bag?

Using a simple bag, place various 3D objects from around the house into the bag and take it in turns to describe them by their 3D properties. Perhaps you can award points if you or your child is able to describe the shape by using the correct vocabulary. You can use this <u>maths glossary</u> to help.



**SECRET SKILLS:** geometry and shapes; maths vocabulary

### Make time for fun

There are lots of opportunities to have fun when learning to tell the time. Have a go at some enjoyable activities that include measuring time, for example:

- use a timer for baking
- play a board game with a sand timer
- use a stopwatch to time a race or challenge



SECRET SKILLS: telling the time; measurement



#### Ready, set, bake!

Cooking is a wonderful way to get children weighing and measuring practically and reading scales carefully. Try this simple cheese scone recipe together.



**SECRET SKILLS:** measurement; telling the time; geometry and shapes

#### **Cheese Scones**

Use this recipe to practise measuring. Ask an adult to help you.

#### Measure out:

22g self-raising flour 55g butter 150ml milk 25g cheese

Mix in a bowl to make a dough

Roll out the dough to 2cm thick.

Cut out circles. Put on a baking tray. Brush with milk.

Ask an adult to bake them at 220°C for 12-15 minutes until golden brown.







# Unearth hidden numbers in the great outdoors age 8–11

Take older explorers on an expedition to uncover numbers in the garden or out on a walk. Discover wildlife and plants, and track distances and weather conditions, while also practising measurement and statistics.

### In the garden

Plants, gardens, and the wildlife living in them change throughout the year, particularly in autumn. This makes the garden an interesting place to collect and compare data. Why not hold a bug hunt and use a tally chart to record the minibeasts (small but fascinating creatures like beetles, spiders, and snails) you find? You could also try birdwatching and record the numbers and types of birds in your garden. Explorers can create pictograms or bar graphs to show what they have found.



SECRET SKILLS: measurement; statistics

### On a walk

When taking a walk, explorers can think about and estimate how many steps the walk might take, how far you are going, and how long it will take. Most smartphones will be able to record this kind of information for you, so you can check how accurate their estimates were!

```
+-
×÷
```

**SECRET SKILLS:** measurement

### Talk about the weather

Why not try keeping a weather chart? You can record temperatures, look at where is warmest or coldest, or calculate how many degrees colder/ warmer at one time of day compared to another. What kinds of conclusions can they draw from their data? Are there any interesting patterns?



SECRET SKILLS: measurement; statistics

# Adventures in maths to enjoy at home age 8–11

Older explorers can practise lots of secret skills through games and baking. These adventures test multiplication, times tables, geometry, and coordinates, while this simple shortbread recipe gets you thinking about fractions, ratios, and measuring.

### **Playing card games**

A bit of healthy competition between siblings or friends can be a great motivator for learning some of the trickier times tables!

- 1. Take a pack of cards and remove the Kings and Jokers. In this game, Aces = 1, Jacks = 11, and Queens = 12.
- 2. Deal 6 cards to each player.
- 3. Each player places 1 card down at the same time, and then both players must multiply the cards together.
- 4. The winner of the hand is the player who says the correct product first (the 'product' is the name we give to the result when two numbers are multiplied together). The winner picks up the played cards.
- 5. When a player runs out of cards, they pick up 2 more from the spare pile.
- 6. The winner is the one with the most cards when the spare pile is empty.

Each player should work out the product of the card they put down and the card in the middle of the table, with the winner of each hand the player who gets their answer first.



SECRET SKILLS: multiplication; times tables



Draw a map of your house or garden on a coordinate grid. Take turns to hide 'treasure' around the house and give each other coordinates from the map as clues for the position of hidden objects. You can find an example of a treasure map <u>here</u>.



**SECRET SKILLS:** geometry and shapes; coordinates



### **Get baking**

Explorers can experience metric/imperial measures in recipe books and practise scaling by multiplying or dividing, e.g. double or half the amount in the recipe.

Make this tasty treat whilst converting ounces to grams and inches to centimetres, measuring, timing, and multiplying fractions by fractions. This <u>fraction wall</u> could help you.



**SECRET SKILLS:** multiplication and division; measurement; fractions; ratios and proportion





#### Top tip:

To convert ounces to grams, 1 ounce is the same as about 30 grams. So, to convert ounces to grams, multiply the number of ounces by 30. To convert inches to centimetres, 1 inch is the same as about 2  $\frac{1}{2}$  centimetres. So, to convert inches to centimetres, multiply the number of inches by 2  $\frac{1}{2}$ .

#### Measure out:

#### 6oz plain flour

4oz butter or margarine cut into small chunks 2oz caster sugar

Mix together the sugar and flour in a large bowl.

Add the butter to the bowl and rub it into the sugar and flour mix with your fingers. Repeat until the mixture looks like sand.

Shape the mixture into a smooth ball and put it onto a baking tray.

Use a rolling pin to gently roll it flat. Aim for a shape that is roughly rectangular. Leave it quite thick: about  $\frac{1}{2}$  an inch, even at the edges.  $\frac{1}{2}$  an inch = \_\_\_\_ centimetres.

## Download



Activities and ideas inspired by content created for Oxford Owl for Home, including articles by:

Isabel Thomas Lousie Pennington Fiona Lazenby

# Suggested worksheets:







#### **Further resources**

If you enjoy the activities in this pack and want more, check out these resources.

Progress with Oxford Bond Brain Training More Maths Skills from Oxford Owl





#### .....

#### Lucky multiples

Roll the die and move forward by the number rolled. If you land on a multiple of 3, move forward another two places. If you land on a multiple of 7, move forward another three places. If you land on a multiple of 3 and 7, move forward another five places.

					the 'Finish' space to win!			
			- <u>-</u>	You must land directly on				
Finish	140	21	70	45	42	39	66 🔸	24
3 -	<b>→</b> 90	21	33	15	60	133	105	6
84	7	42	14	18	48	84	12 🔸	- 30
Start-	<b>→</b> 49	63	18	6	35	77	9	36

