

12 Awesome Autumn Maths Activities

A number of tasks and activities to use throughout the autumn term

KS1 / KS2

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What to expect in this resource

We know that autumn is a season of change, but one thing that always remains whatever the season is the need for fun maths ideas. In this resource you will find 12 awesome autumn maths activities you can use this term, and we have included a mixture of active outdoor activities and tasks that can be tackled in the classroom.

It is packed with active activities that will help your pupils learn about Roman Numerals, symmetry and more, so take a look through the resource and help your class get active with maths this autumn!

Count The Conkers

This simple and fun activity is a fantastic way to teach your class about place value using some of the items you can find in the school playground and field. It is a fantastic way to get your class moving around and being active whilst learning maths, and you should see a huge amount of engagement with this task!



You will need

- Baskets or buckets (which will act as 100s, 10s, 1s columns and so on...)
- Conkers (to throw into the baskets/buckets)

How to run the activity

1. Send your class out into the playground or field to collect around 20 conkers. They can do this as a group or individually.
2. Whilst they are collecting conkers, you can set up your baskets and assign them to the 100s, 10s, and 1s columns needed when teaching place value. Placing a label on each basket can act as a reminder of which column is which for your pupils.
3. Pick a number and shout it out to your pupils.

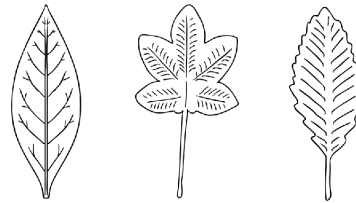
They will then throw the conkers into the respective baskets (columns) to make up the number.

e.g. If you shout 684 then 6 conkers will go in the 100s basket (column), 8 conkers into the 10s basket (column), and 4 conkers into the 1s basket (column).

You could also add in an element of competition and see who can make up the number first, but make sure everyone who is not playing is a safe distance from the conker throwing zone!

Symmetry Amongst Nature

This is a great activity to engage your class with symmetry in a clever and fun way. Incorporating nature, which you can find within the school grounds, into your lessons is a fabulous way to generate excitement amongst your pupils, and it is always good when concrete resources come free from the hand of mother nature herself!



You will need

- Lots and lots of leaves!

How to run the activity

1. Instruct your class to head outside and collect a number of different types of leaves that can be found in the playground. The more complete the leaf is the better, so instruct your pupils to hunt down the leaves that the caterpillars haven't got to yet.
2. Ask your pupils to trace around the leaves they have collected onto a piece of paper and then cut it out.
3. The final step is to ask them to work out the lines of symmetry for each of the leaves. They may realise that due to the huge variation provided by nature that their leaves may not have a line of symmetry within them, but this is okay as it tests reasoning and encourages verbalisation.

Autumnal Place Value

This fun maths activity is a great alternative to teaching in the classroom! Encouraging your pupils to go outdoors and find natural items will keep them fully engaged when it comes to learning about place value, and help cement the principle through the use of active maths.



You will need

- Various natural items like twigs, leaves, conkers, stones.

How to run the activity

1. Take your class outside and ask them to find as many natural items as they can.
2. Decide upon which groups of items will act as the replacements for each of the 1s, 10s, 100s classroom place value counters. For example you may decide that rocks are now 10s, twigs are 100s and leaves are 1000s.
3. Shout out a number to your class.
4. It is up to your pupils to establish which is the right amount of each item needed to create the number you have called out.

Place Value Football

This interactive maths game is a great way to test your classes' understanding of place value and make the most of the last couple of weeks of sunshine. With the Premier League season now in full flow, this is a great chance for your class to emulate their footballing heroes whilst learning about place value.



You will need

- PE cones
- A football

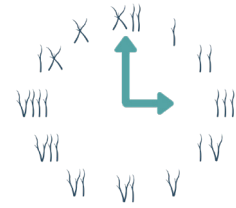
How to run the activity

1. Lay out the cones to make some goals (we recommend starting with 3 goals next to each other). Each goal will represent a place value column e.g. 100s, 10s and 1s.
2. Separate your pupils into teams of 6. This will enable you to have 2 pupils either side of each goal.
3. Pick a number and shout it out to your pupils (e.g. 385)
4. Your class will then pass the ball to their partner through each column to make up the number (e.g. pass through the 100s column 3 times, the 10s column 8 times, and the 1s column 5 times to make up 385).

You could also add an element of competition and see who can make up the number the fastest by having two sets of goals. Make sure they don't kick the ball too hard though!

Stick Numbers

This is a great activity for autumn time as there are always a lot of twigs lying around on the ground. If you teach at a school without a huge amount of outside space you can always ask the children to bring some in from home. With lots of variations of this task available (numbers, roman numerals and angles) it is sure to keep your class busy!



You will need

- A large collection of twigs

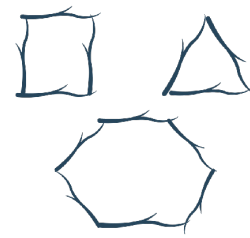
How to run the activity

1. Get your class to collect a large number of twigs.
2. Once they have collected enough their task is to make the numerals 1 to 9.
3. The next step is to mix it up and challenge your pupils. Can they make the number 2 with 2 twigs? 3 with 3 twigs, and so on?
4. What about angles? See if the children can spot the angles they make! Can they make a 3 with 3 angles? A 4 with 4 angles, and so on?
5. The next variation involves Roman Numerals! Could the children make a clock face with all the Roman Numerals from I - XII? (The pupils can make the sticks smaller by snapping them if they need to.)

If you really wanted to stretch and challenge your class you could ask the pupils if they can make sums using Arabic and Roman Numerals! e.g. $10 \times VII = 70$.

Shapely Sticks

Twigs are a fabulous resource for making shapes and demonstrating various angles. This activity is a great way to get your class up and about whilst learning maths, and it can easily be adapted to help teach different maths topics.



You will need

- A large collection of twigs

How to run the activity

1. The first thing to do is get your class to collect a big bundle of twigs. It is a case of the more the merrier here, as in an ideal world you will have enough twigs for the whole class to use.
2. Get the pupils to make as many shapes with twigs as they can with right-angles, verbalising as they go.

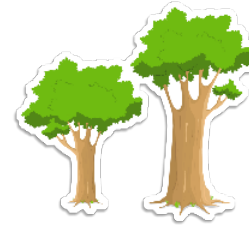
Challenge: Can they make a hendecagon? How many interior angles does it have?

Although twigs aren't always perfectly straight, making right-angles can be great fun especially when children are tasked to build a 2D shape like a house or boat.

You also have the chance to truly give your class a challenge here, so why not see if they can make a 3D shape using twigs and twine?

Artistic Inspiration

This is a great maths activity to follow on from the Shapely Sticks task. This activity will help your pupils to discover the natural connection between maths and art, so this is one to put on the autumn art ideas list too!



You will need

- A collection of natural materials including pine cones, twigs, acorns, conkers and leaves

How to run the activity

Link the 'angles and shapes' twig maths activity to the sculptor Andy Goldsworthy and encourage your pupils to build and design their own outdoor maths pieces of art.

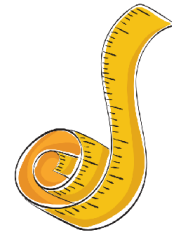
To inspire your class show examples of the artist's work to them. Tell them that they could combine different materials to make shapes and collecting things like flowers, leaves, stones and twigs will create a special environmental art sculpture just like Andy Goldsworthy's.

This is a great activity for the end of term as it gets children excited about maths through exploring nature!

Classroom Bonus: Take pictures of their sculptures and hang them up around your classroom!

Measure Me, Treasure Me

This super autumn maths activity is an absolute classic that can be done both inside or outside the classroom. It's all about finding the approximate age of a tree (or person), using only a tape measure or a piece of string!



You will need

- A tape measure or piece of string

How to run the activity

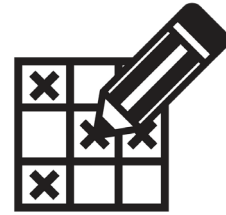
1. Get your class to measure the distance around a tree trunk, about one metre from the ground.
2. Ask them to work out the age of the tree based on the fact that every 2.5cm of girth correlates to approximately 1 year of growth.
3. Get your pupils to compare various trees around the school ground and see which is the oldest.

E.g. A tree with a girth of 100cm will be around 40 years old ($100 \div 2.5 = 40$).

Bonus Idea: To recreate this activity in the classroom get the children to stand still and pretend to be trees themselves to measure. They'll love pretending their arms are branches!

Times Table Bingo

This autumn maths activity is great for a rainy day as it's sure to lift your classes' spirits. Everyone loves a game or two of bingo, so incorporating this fun and easy game with times tables is a fabulous way to get your class thinking on the spot!



You will need

- A pack of 12 Ping-Pong balls
- A permanent marker

How to run the activity

1. Choose a times table (for example the 5 times table).
2. Decide which method you would like to use to play Times Tables Bingo.

There are 3 ways to play this Times Table Bingo:

Method Number 1

Write any times table on the ball up to 12. (e.g. 5 x 1 up to 5 x 12).

Method Number 2

Write the product of a times table on the Ping-Pong balls (e.g. 5 up to 60)

Method Number 3

Write the division of the product by one factor on each Ping-Pong ball (e.g. $5 \div 5$ up to $60 \div 5$)

Once you know which version of the game you are going to play:

- Place these balls into a bucket/bag.
- Use miniature whiteboards to create a bingo grid for each pupil.
- Draw out a ball at a time and shout it out to the class.
- They will then write what is on the ball and the answer on the bingo card.
- The first to answer and fill all of their bingo card shouts "BINGO" (and potentially wins a prize)

You can add an element of competition by seeing who can complete all 3 variations of 'Times Tables Bingo' first.

It's Time To Make A Crumble

Autumn is a time for comfort food. Crumbles, cookies, biscuits, pizza...! This fun and easy activity is bound to get your class thinking about all the scrummy food that is to come, whilst testing their maths ability. This activity can be linked to ratio and proportion, fractions and converting between different units, so there are plenty of things to test your class on!



You will need

- Nothing apart from maths books and some willing pupils!

How to run the activity

You can either get your class to research and create recipes for their favourite comfort foods, or you can provide the recipe for them.

As an example, you could give your class this recipe and ask them to rewrite it for 8 people, then for 4 people, then for 2 people....

Apple and Blackberry crumble:

(serves 16 people)

For the crumble topping:

480g plain flour

240g caster sugar

240g unsalted butter (At room temperature and cut into pieces)

For the fruit base:

1, 200g apples

120g unsalted butter

120g sugar

460g blackberries

1 tbsp ground cinnamon

Vanilla ice cream to serve! Yum!

An Autumn Investigation

Get your class to figure out the answers to these seasonal questions. As well as testing their knowledge on time, it is also a fun way to learn about the autumn season in a bit more detail. These kinds of questions are a great way to encourage reasoning amongst your class, and they should result in lots of verbalisation if they work out the answers in groups.



You will need

- Nothing apart from maths books and some willing pupils!

How to run the activity

It is simply a case of writing these questions (or others you think of) up on the board for the pupils to answer. Questions you could use include:

1. How many months are in Autumn?
2. How many days are in Autumn?
3. How many hours are in Autumn?
4. How many minutes are in Autumn?
5. If the daylight gets shorter by 3 minutes each day in Autumn, how many hours of daylight are in October?

Autumnal Logic Puzzle










This Autumnal Logic Puzzle is a great resource to use in the classroom as it will really test your pupils. Once they have cracked the code and worked out how much a leaf, a tree and a pumpkin are worth, you can adapt the puzzle and update the numbers.

You will need

- The Autumnal Logic Puzzle below

How to run the activity

Hand out this sheet in class!

			9.1
			7.7
			5.3
6.3		8.6	


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