Y5/6 Maths Outdoor Challenges


You need: Trim trail or obstacle course, timers, pen and paper, playground/field

Estimate how long it will take each of your team to get round the trail as a relay.

Does it matter who goes first/last?
Work together as a team to find the best team combination to get the fastest time.

What if you started the trail at the end and came through back to the start.
Would it make a difference?
If you don't have a trim trail then make up your own obstacle course you can use.

Rainy Day Puddles


You need: pen and paper, measuring equipment, graph paper, rainy day!

Next time it rains go outside and find 3 different puddles.
One in the sun, one in the shade and one in a mix of sun and shade.

Measure the following:

- Width at the widest part
- The outside edge.
- Estimate the area of the puddle.

Every half an hour measure the same measurements.
Once you have $4 / 5$ measures over the day then create line graphs for your puddles. Compare with other groups.


You need: pen and paper, squared paper to make grids, measuring equipment for , field or grass areas

First make yourself a $10 \times 10 \mathrm{~cm} 100$ square.

Mark out a grid on the grass that is 50 cm $\times 50 \mathrm{~cm}$.
Mark the grid into smaller squares using your $10 \times 10 \mathrm{~cm} 100$ square.

Work as a team to investigate which square in your grid has:

- the highest fraction of grass
- the highest fraction of weed
- the highest fraction of flowers Mark your findings on your 100 grid and then compare results with a different group.
Estimate how many blades of grass are within a 1 cm square and use this to estimate how many in your whole grid. How close to 1 million are you?


You need: pen and paper, measuring equipment, graph paper, sunny day!

On a sunny day draw around different people's shadows.

How are you going to find the area of the shadow?
Compare with others.
Who has the most efficient strategy?
Test out your different strategies.
Is it easier or harder depending on the height/length of the shadow?

Look at the angles within your shadows can you spot any acute, reflex, obtuse, right angles.

Playground Areas.


You need: pen and paper, newspaper, measuring equipment for length, playground/field

Make a square metre from newspaper.
Choose 6 different spaces outdoors.
Use your newspaper square metre to estimate the area of each space.

Check the correct area by using measuring equipment.

How close were your estimates?
Could you think of a something better to use to make your estimates?


You need: pen and paper, collection pots, leaves, book about different types of leaves

As a group collect 100 leaves. Collect as many different types of leaf as you can.

Agree how you are going to sort the leaves based on their shape.

Describe your set of leaves using fractions and \%s. Can you simplify any of the fractions?

How does your set of leaves compare to another groups?

