

Day Four

Intermediate Classes (2nd, 3rd and 4th Class)



Geography Activity Sheet

The following resources have been designed as an extension to the Food Dudes Week, intermediate level, day 4 video. These resources link with the geography curriculum for 2nd, 3rd and 4th class pupils.

Sheet A: Suitable for 2nd class pupils

Sheet B: Suitable for 3rd and 4th class pupils

Video Message:

The intermediate level, day 4 video explains the steps involved in growing a tomato plant.

These activities are linked to the following **curricular areas**:

Geography > Natural Environments > Weather

Geography > Natural Environments > Weather, climate and atmosphere

Key Learning Outcomes:

2nd Class Pupils should be enabled to:

- ✓ Observe and record varying weather conditions using appropriate vocabulary and simple equipment
- ✓ Observe and record the influences weather and seasonal changes have on people, animals and plants in the locality

3rd and 4th Class Pupils should be enabled to:

- ✓ Compare temperatures indoors and outdoors, in shade and sunlight, on different sides of the same building, and explore reasons for differences
- ✓ Begin to appreciate the importance of solar energy for the Earth

Teacher Guidelines:

The following activities sheets can be printed for pupils or the questions can be answered in copy books.

Sheet A: Making a rain gauge

- ✓ Pupils can split into groups and bring in one old plastic bottle per group to use for the exercise.
- ✓ Materials: An old recycled bottle, pen, marker, ruler, tape, pebbles.

Sheet B: Measuring heat and temperature

- ✓ Materials: Thermometer

Note: These activities are best completed in conjunction with a grow your own exercise, such as the one outlined in the video. If you already have a school garden or plant(s) growing in your classroom, you can complete the same activities by monitoring the growth of your existing plant(s).

Geography Group Activity

Sheet A

Can you help Tom to understand the weather, and how it can help him to grow his own fruit and vegetables?

Name _____

We are going to make a rain gauge!

This will measure how much rain falls in your school yard or garden. Rain is important to help plants grow!

Step 1: Take an old plastic drinks bottle and, with help from your teacher, cut the top off the bottle.

Step 2: Place some small stones or pebbles inside the bottom of your rain gauge. This will help to keep it upright and stop it from blowing over in the wind! Then, using tape, stick the top of the bottle back on – only this time, stick it on upside down, so that the mouth is inside the bottle.



Step 3: Using a marker pen and a ruler, draw a scale on the side of your bottle. Rain is measured in millimetres (mm). These should be marked on your ruler. A good way to remember it, is that 10 millimetres (mm) = 1 centimetre (cm). You can start your scale near the bottom of the bottle and go as close to the top as you can.

Step 4: Pour water into the bottle until it reaches the bottom strip on your scale. Congratulations, you have finished your rain gauge!

Step 5: Put your rain gauge outside where it can collect water when it starts raining.

After a rain shower has finished, check to see how far up the scale the water has risen.

Record the reading on your rain gauge here: _____ mm

You can measure rainfall like this every day for the next 4 weeks, and record each day's figures below:



Geography Group Activity

Sheet A

Week One	
Day of the Week	Rainfall (in mm)
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Week Two	
Day of the Week	Rainfall (in mm)
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Week Three	
Day of the Week	Rainfall (in mm)
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Week Four	
Day of the Week	Rainfall (in mm)
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Which day, in which week, had the most rainfall overall? _____

Geography Group Activity

Sheet A

This is a really good exercise to do each term, because Ireland's rainfall levels are different in Spring, Summer, Autumn, and Winter. Sometimes, when it is very cold, rain will fall in the form of snow or hail. When the snow or hail melts, this will turn to water and will water your plants too!

At the same time as you are recording your rainfall figures, look at your tomato plant – or any of the crops or plants – in your school garden.

Measure how tall the plant is, and write its height in centimetres (cm), here: _____ cm

Keep a record of how much your plant grows every week for the next 4 weeks, by measuring it and recording its height below:

Week	Height (in cm)
End of Week 1	
End of Week 2	
End of Week 3	
End of Week 4	

Has your plant grown in the last 4 weeks? How much has it grown by? _____ cm

Now, compare it to your rainfall chart for the last 4 weeks. Do you think that rainfall has affected your plant's growth? Can you see a pattern between the amount of rain that fell and the amount your plant has grown?

Rainfall is very important, because it keeps our soil moist and this helps our plants to grow. If we don't get enough rainfall, or if we get too much rainfall, this can affect our plants and crops, meaning that sometimes they don't grow as big or tall as we would like.

Alongside rainfall, sunshine is also very important in helping our plants to grow. Often when it is raining, this means it isn't very sunny either, because rain clouds can cover the Sun and block lots of it's light from reaching the earth. If our plants become too cold, or don't get enough sunshine, they won't grow like they should. If you can, you should try to keep your plants in a warm, sunny place.

How do you think your plants will change from this term, to next?

Geography Group Activity

Sheet B

Can you help Charlie to understand heat and sunlight, and how it can help her to grow her own fruit and vegetables?

Name _____

Charlie is sad because she has tried to grow a tomato plant, but it hasn't got any bigger and she is worried that she is doing something wrong. She needs your help to find the best place for her tomato plant to grow – can you help her?

Which areas in your school do you think get lots of sunshine? Write down 3 places. At least one of these should be indoors:

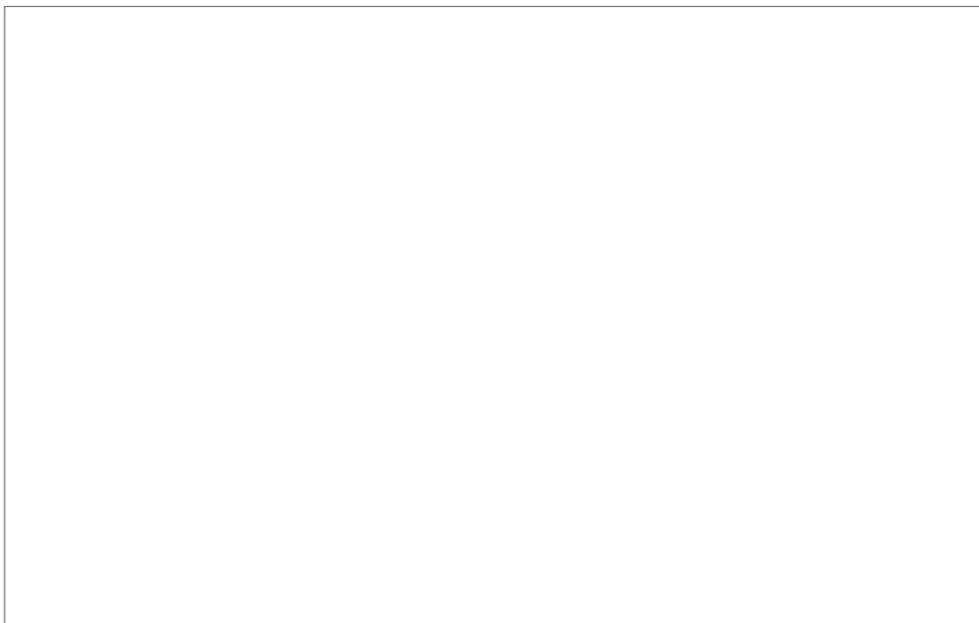
1. _____
2. _____
3. _____

Which areas do you think are quite dark, or shady? Write down 3 places. Again, at least one of these should be indoors:

1. _____
2. _____
3. _____

Draw a map of your school from above. Mark on your school map where all of the sunny places are and where all of the shady places are. You might like to do this with two different colours.

My School Map:



Geography Group Activity

Sheet B



Food Dudes Week

Now, using a thermometer, record the temperature in the 3 shady places and the 3 sunny places. Temperature is measured in Degrees Celsius°. If you have time, you should do this at a few different times of the day, to see if the temperature changes from early in the morning to later in the afternoon.

Sunny Places		
Name of Place	Time of Day	Temperature (in degrees)

Shady Places		
Name of Place	Time of Day	Temperature (in degrees)

Geography Group Activity

Sheet B



Food Dudes Week

Where was the warmest temperature recorded? _____

Was this a sunny place, or a shady place? _____

Was this indoors or outdoors? _____

What time of the day was the warmest temperature recorded? _____

Why do you think this was? _____

We know that it is important for plants to stay warm and get lots of light in order to help them grow. This is how plants produce energy, which helps them get bigger and stronger – just like us, when we eat our fruit and vegetables!

Different plants need different amounts of sunlight to survive but without sunlight, our plants wouldn't grow at all. This would mean that humans and animals wouldn't have any food either, so sunlight is one of the most important factors in the proper function of life itself.

Based on your experiment, where do you think Charlie should put her tomato plant to get the most heat and light?
