



**E-book Code:  
REAU4011**



## ***Science Solutions***

# **Book 1**

**\* Seasons and  
Weather**

**\* Water Science**

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# Contents

TEACHERS' NOTES .....	2
ABOUT MULTIPLE INTELLIGENCES .....	4
STUDENT NOTES: Multiple Intelligences .....	6
CURRICULUM LINKS .....	8
STUDENT SELF-ASSESSMENT CHECKLIST .....	10
TEACHER ASSESSMENT CHECKLIST .....	11

## Seasons and Weather

SEASONS AND WEATHER - BACKGROUND INFORMATION .....	12
Activity 1: Collecting Rain .....	14
Activity 2: Weather Workshop .....	15
Activity 3: Seasonal Story Stir-up .....	16
Activity 4: Weather Words .....	17
Activity 5: Switching Seasons in the Same Scene .....	18
Activity 6: Disaster Diorama .....	19
Activity 7: Ahead With Phys. Ed. ....	20
Activity 8: Rhythms for Rural Rain .....	21
Activity 9: Song of the Seasons .....	22
Activity 10 : Seasonal Safety .....	23
Activity 11: Weather Wizard .....	24
Activity 12: Animal Action .....	25
Activity 13: Reasons for Seasons .....	26
Activity 14: Ready for Anything .....	27
Activity 15: A Stormy Mood .....	28
Activity 16: If I Was a Season.....	29

## Water Science

WATER SCIENCE - BACKGROUND INFORMATION .....	30
Activity 1: Saturation Station .....	32
Activity 2: A Drop of Time .....	33
Activity 3: Water Words .....	34
Activity 4: Water, Water Everywhere .....	35
Activity 5: H <sub>2</sub> O to Go .....	36
Activity 6: Journey of a Drop .....	37
Activity 7: Aqua Charades .....	38
Activity 8: Scavenger Hunt .....	39
Activity 9: Liquid Tunes .....	40
Activity 10: Scuba Sounds .....	41
Activity 11: Water-free Fun .....	42
Activity 12: Perfect for Pets .....	43
Activity 13: The Human Bar Graph .....	44
Activity 14: Puppet Power .....	45
Activity 15: Personal Score .....	46
Want More? .....	47



Name: \_\_\_\_\_

# Activity

## Collecting Rain

### Materials:

- clear plastic beaker
- a ruler with millimetres marked
- pre-made recording chart



### Task:

**How much rain does your school have in a week? Record your predictions and findings in the table below, or create your own table if you need more room.**

- 1) At the start of a forecasted rainy week, read the weather section of the newspaper and make a prediction for the rainfall in millimetres for each day (you can either predict for all days at the start of the week, or make a prediction in the morning of each day). Keep in mind that you will only be measuring rainfall for school hours, not the whole 24-hour period as noted in the paper.
- 2) Place a plastic beaker in an area that is open to rainfall but protected from the wind and other students.
- 3) Each afternoon, record the rainfall in millimetres in the beaker by placing the ruler alongside the water level. Check that '0' is in line with the bottom of the beaker. Make sure it is empty for the next collection each morning. Compare the readings to your predictions as you go. Check out the example below.
- 4) At the end of the week, make a line graph showing rainfall for the week. Compare your findings to the line graph showing your predictions.

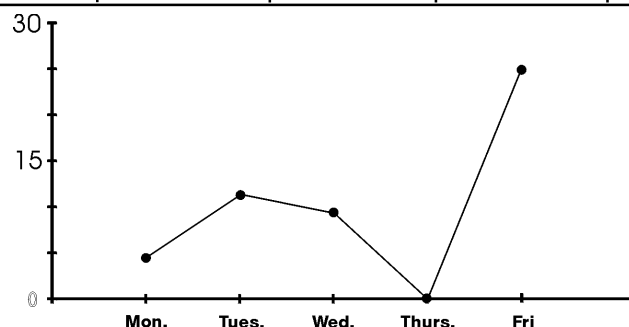
### Extra:

- Write a report, including your evaluation of anything you think may have influenced your results, and the average daytime rainfall for the week.

### Get Involved:

- Some states have "junior weather watcher" programs for school students to collect weather details for local television news. Find out how your class can be a part of this.

Date:	Predict	Result	Predict	Result
<b>MONDAY</b>	10mm	4mm		
<b>TUESDAY</b>	8mm	12mm		
<b>WEDNESDAY</b>	10mm	9mm		
<b>THURSDAY</b>	3mm	0mm		
<b>FRIDAY</b>	20mm	25mm		



Related Outcome: Students will predict and record data in table form and display results in a line graph.  
Subject Area: Science – Working Scientifically; Maths – Chance and Data, Measurement.



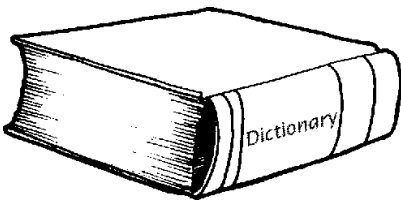
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# Activity 4

## Weather Words

### Materials:

- books on weather or seasons
- dictionary
- grid paper



### Task:

**Make a weather dictionary for students in your class to use.**

Find out the meaning of words that are commonly used when talking about weather and write the meanings in your own words.

Try to use only one or two sentences to describe each word—the aim is to be concise. Write some examples here:

LETTER	WORD	MEANING
e.g. A	Atmosphere	The surrounding air or climate in a place.

### Extra:

- ▶ Use some of the words to make into a crossword puzzle. Grid paper is useful as it provides one square to write each letter in. Use pencil so that you can move words around. Add clues, rub the words out and give to a friend.

### Get Involved:

- ▶ Send your puzzle in to a "Kids Page" for a local paper or magazine.

Challenge yourself by finding at least one word for each letter of the alphabet. You may need to get creative with q, x and z! Write these on a separate sheet.

Put the words in alphabetical order and present in a small booklet. You may wish to add some illustrations for words that are more difficult to explain.





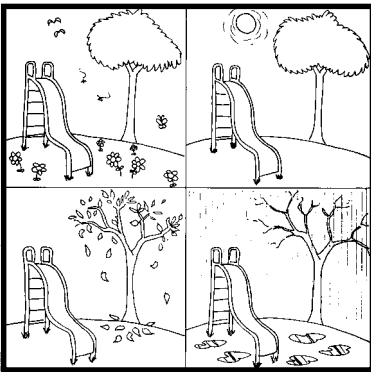
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# Activity 5

## Switching Seasons in the Same Scene

### Materials:

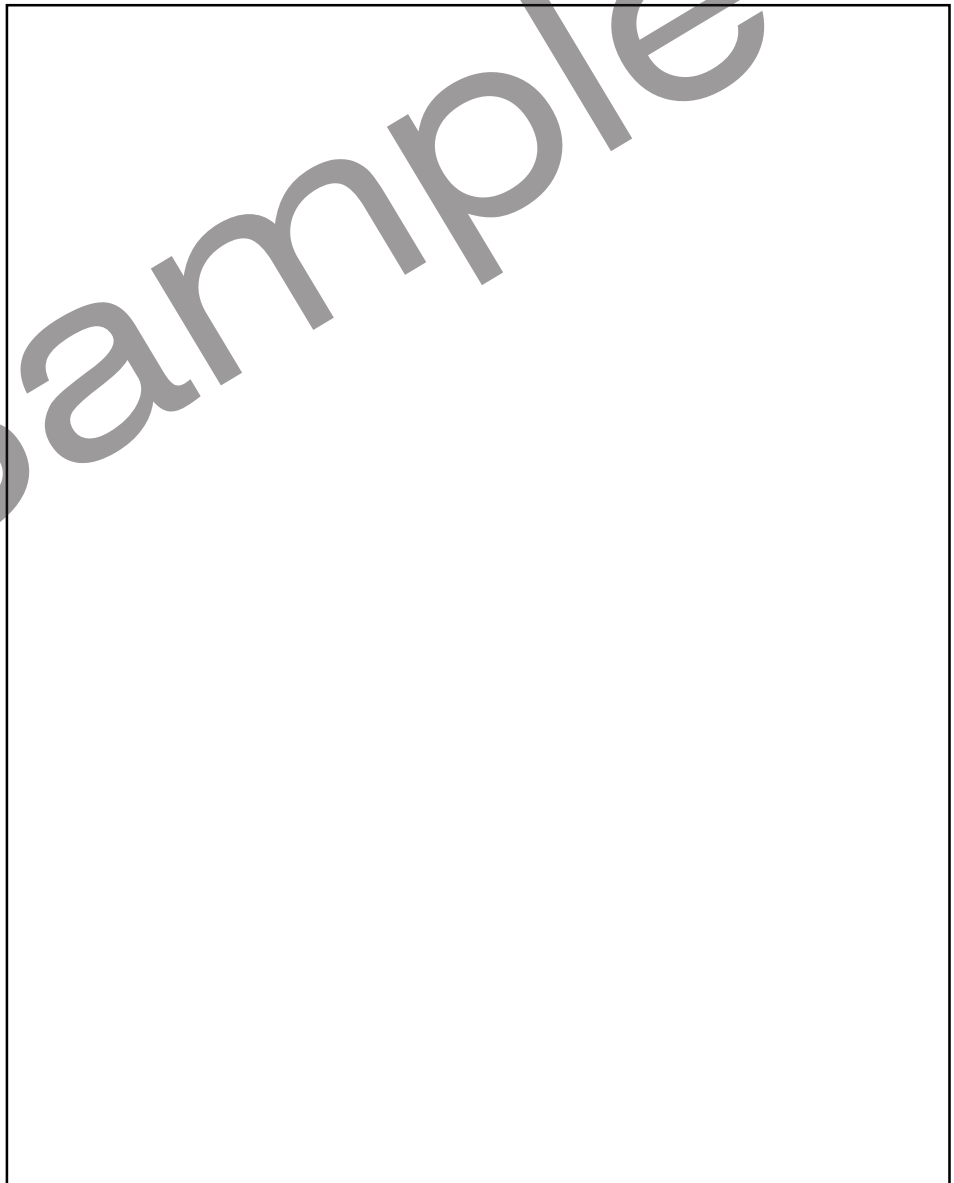
- paper
- pencils
- clipboard to lean on



### Task:

#### Show a schoolyard scene in four different seasons.

- Choose a view of the school playground, preferably with some plants included. Carefully draw an outline of the scene from where you are sitting. You may wish to do a rough draft in this box first:
- Trace, copy or photocopy (with your teacher's help) the same scene three more times.
- Now, add coloured details to each scene to represent the four seasons.



### Extra:

- ▶ Present the four pictures on a large piece of paper or card. Add a creative border and a heading.

### Get Involved:

- ▶ Promote your school playground by asking if your picture can be displayed in the front office. Don't forget to frame it and add the artist's name and details.





Name: \_\_\_\_\_

# Activity 12

## Animal Action

### Materials:

- paper
- pencils



### Task:

#### How do pets cope with bad weather?

Imagine that you are a pet such as a cat or dog (you may even like to choose your own pet).

What pet have you chosen? \_\_\_\_\_

- Create a list of all the types of extreme weather that you can think of, e.g. rain, hail, strong winds, heatwave, cold nights, etc.
- Next to each idea, write the difficulties that your pet might experience in this situation.

Weather: \_\_\_\_\_

Pet Experiences: \_\_\_\_\_

\_\_\_\_\_

Weather: \_\_\_\_\_

Pet Experiences: \_\_\_\_\_

\_\_\_\_\_

Weather: \_\_\_\_\_

Pet Experiences: \_\_\_\_\_

\_\_\_\_\_

Weather: \_\_\_\_\_

Pet Experiences: \_\_\_\_\_

\_\_\_\_\_

Weather: \_\_\_\_\_

Pet Experiences: \_\_\_\_\_

\_\_\_\_\_

### Extra:

- Choose one of the worst case scenarios and write a diary entry from the animal's point of view describing how they felt in that kind of weather, and what they did to try and protect themselves.

### Get Involved:

- Contact your local RSPCA or pet refuge by email, telephone or letter and ask about how people can keep their pets safe from harsh weather conditions. Use some of the ideas to talk to your parents about how you can make life better for your pet.



Related Outcome: Students will consider the needs of domestic pets during extreme weather conditions.  
Subject Area: Science – Life and Living; English – Writing,