

A FREE RESOURCE PACK FROM EDUCATION CITY

# **Plants**







### **Plants Worksheets**

#### What Does This Pack Include?

This pack has been created by teachers, for teachers. In it, you'll find high quality worksheets and answer sheets to support the teaching of 'plants'.

To go directly to the content, simply click on the title in the index below:

FLOWER POWER:	
Learning Objective: Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.	Activity Sheet     Activity Sheet with Answers

GRANNY'S GARDEN:	
Learning Objective: Understand the requirements of plants for growth.	<ul><li>45 minute Lesson Plan</li><li>Activity Sheet</li><li>Activity Sheet with Answers</li></ul>

SEED FEED:	
Learning Objective: Consider conditions that might affect germination.	<ul><li>60 minute Lesson Plan</li><li>Activity Sheet</li><li>Activity Sheet with Answers</li></ul>
KLW Chart	

### Other Resources Linking to the Theme

Before deciding what to include in your lesson, check out our online content relating to plant life too. It's simple to find, just enter the Content ID number into EducationCity's Search Content tool!



### **Enjoyed these resources?**

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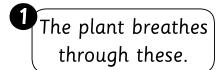
# Flower Power

EducationCity®

Activitu Sheet

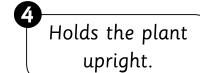
	•		
Name:		Class:	

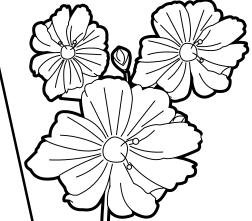
Connect each statement to the part of the plant it is describing. One has been done for you.



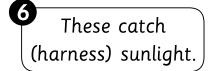
This is where the plant makes its seeds.

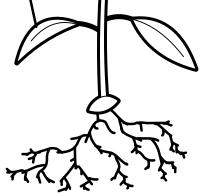
Attracts insects (for pollination).





Takes in water.







Holds the plant in the ground.

Answer the questions.

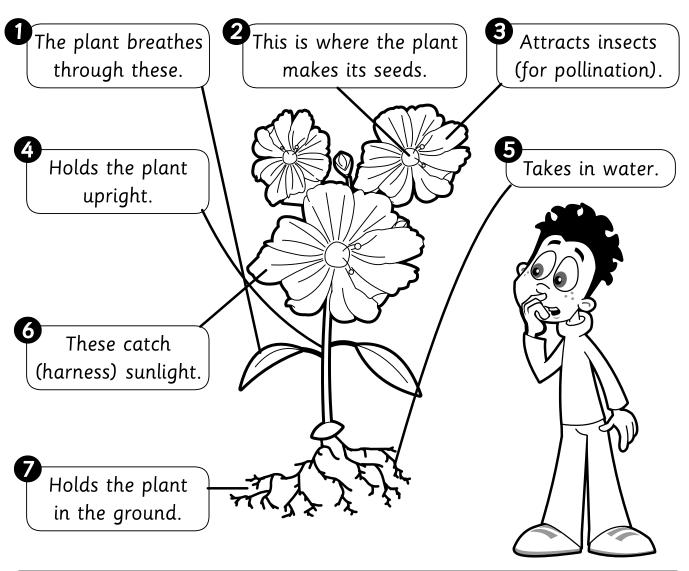
- Where does the plant get its light from, to help it grow?
- **b** Where does the plant get most of its water from?
- (c) What two things help the plant to spread (disperse) its seeds?

# Flower Power Activity Sheet

EducationCity°

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

Connect each statement to the part of the plant it is describing. One has been done for you.



Answer the questions.

- Where does the plant get its light from, to help it grow? the Sun.
- Where does the plant get most of its water from? the rain.
- What two things help the plant to spread (disperse) its seeds? the wind and animals.

# Granny's Garden Lesson Plan



### **Overview**

In this hands-on project, students build their understanding of the basic needs of the plants. Students investigate the effects of sunlight on plant development over time. The project involves a 45 minute lesson followed by daily notebook entries.

# **Materials**

- KWL charts (1 per student)
- Lima beans or similar (1 per student)
- 1 large bag of soil

- Clear plastic cups (1 per student)
- Water
- Students' science workbooks

# Preparation (5-15 minutes)

Print out a KWL chart for each student (see separate tab in Teacher Zone). Depending on your time frame, you may wish to fill the plastic cups with soil ahead of time.

# **Introduction (15 minutes)**

Ask the class what they know and would like to learn about the needs of plants. At the end of the discussion, have students fill out the first 2 columns in their KWL charts. Have students fix the charts into their science workbooks. Today the students will begin an experiment to test a plant's basic need for sunlight.

# **Bean Plant Experiment (30 minutes)**

Have each student carry out these steps:

- 1. Place some soil in the cup.
- 2. Place a lima bean in the centre and gently push it into the soil.
- 3. Add a little water to dampen the soil.
- 4. Place half of the cups in a well-lit area and the other half in a dark location.

After the students have finished planting their seeds, discuss what they think will happen to the seeds in each location.

# Follow-Up

Have the students document the progress of the seeds' growth and development in their workbooks each day and discuss the results. Then, have the students ill out the final section (about what they learned) in their KWL charts.

Some questions for discussion:

- What happened to each group of plants?
- What do the plants look like?
- Which group of plants grew largest/fastest?
- Which plants do you think look healthiest?
- Why do you think the plants kept in the dark are smaller than the plants kept in the light?
- What can the experiment tell us about the importance of sunlight?



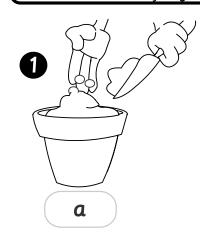
### Granny's Garden

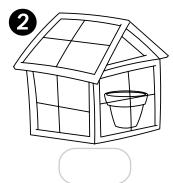
**Activity Sheet** 

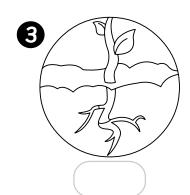
Education City\*

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

Help Sten to grow a plant. Match the labels to the pictures. One has been done for you.







- Put soil in the pot and plant a seed.
- The plant grows flower buds.
- (c) The shoot and root start to grow.
- (The shoot grows into a plant.
- (e) The buds open into flowers.
- Put the pot in the greenhouse.







### Granny's Garden

**Activity Sheet** 

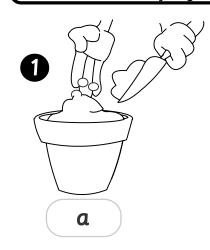
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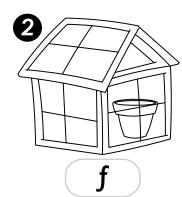
Name: \_\_\_\_\_ Class: \_

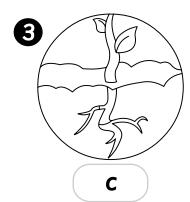
Help Sten to grow a plant.

Match the labels to the pictures.

One has been done for you.



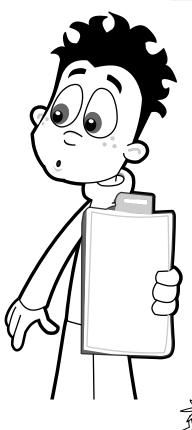




- Put soil in the pot and plant a seed.
- The plant grows flower buds.
- (c) The shoot and root start to grow.
- The shoot grows into a plant.
- (e) The buds open into flowers.
- Put the pot in the greenhouse.







e

# **Seed Feed Lesson Plan**



### **Overview**

In this 60 minute Activity students watch the Learn Screen and Activity. They then plant a seed and make a seed diary that they contribute to as the seed germinates and grows.

### **Materials**

### Resources and organisation:

- Access to the online Learn Screen and Activity
- Seeds for germination
- Seed trays/plant pots
- Soil
- A4 paper made into a diary
- Pencils and pens

### **Lesson Structure**

0-20 minutes	Show the class a seed and ask them what has to happen to it in order for a plant to grow from it. Elicit the understanding that a seed has to germinate and then ask students to think about what conditions are needed for germination, e.g. whether water, soil, warmth and light are all pre-requisites. Show the students the Learn Screen and play through the Activity as a way of consolidating their understanding.

20-25 minutes	Explain to the students that you would like them to plant a seed so that it will germinate and
	discuss with them what conditions are needed following on from the online Activity. Elicit the
	understanding that light is not needed for germination but that warmth is.

25-35 minutes	Allow the students to gather their resources and plant their seed. Discuss where it could be left,
	e.g. warm cupboards, windowsills etc.
35-45 minutes	Explain to the students that you would like them to make a seed diary that outlines what happen

Explain to the students that you would like them to make a seed diary that outlines what happens
to the seed each day. Discuss the fact that most seeds take approximately ten days to germinate
and so they will need to divide an A4 page into ten sections so that they can record what
happens each day.

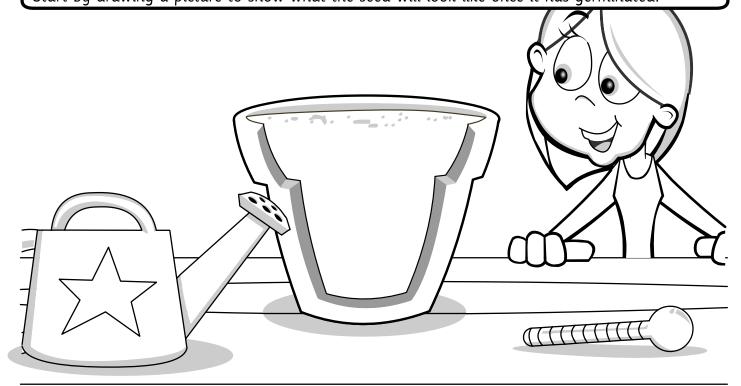
**45-60 minutes** Allow students time to make their diaries and to record what they have done on Day 1.



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

Imagine a friend is trying to get a seed to germinate. Write some instructions to explain how they could do it.

Start by drawing a picture to show what the seed will look like once it has germinated.



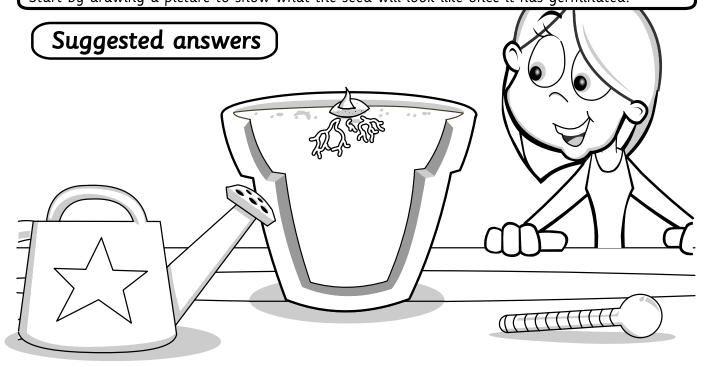
	To get a seed to germinate, you could:
1	
2	
3.	
4	
5	
6	

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

Imagine a friend is trying to get a seed to germinate.

Write some instructions to explain how they could do it.

Start by drawing a picture to show what the seed will look like once it has germinated.



To get a seed to germinate, you could:

1. Fill a pot with soil.

Suggested answers

- 2. Pour some water on to the soil to make it moist as the seed needs moisture in order to germinate.
- 3. Place a seed in the soil.
- 4. Cover the seed with a little soil.
- 5. <u>Leave in a warm place as the seed needs</u> warmth in order to germinate.
- 6. Check regularly and add a little water if necessary so the soil stays moist.

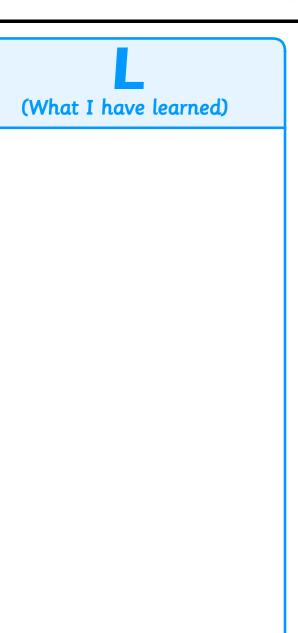
  Do not overwater.











# **About EducationCity**

EducationCity produces fun, educational materials to engage students in learning and empower teachers to tailor their teaching. **Take a look at how EducationCity can support you in the classroom:** 



#### **Target Lesson Objectives Easily**

Find relevant content that links to your curriculum by using our Curriculum Map or Search tool.

Comprehensive and clearly organised by strand, content is so easy to access!



#### Plan in Advance

When planning your lessons, choose your Activities in advance and put them into a MyCity so they're easy for students to access. Choose a meaningful name for each MyCity and you'll be able to update and retrieve them year after year!



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Monitor progress with SuccessTracker and you'll be able to identify the strengths and areas of development for each of your students and so choose relevant activities to help them progress.



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#### Lesson Plans

Access our ready-made Lesson Plans, topical content and Teacher Resource Pack to support teaching and learning in the classroom.

There's more to EducationCity than Activities alone!



#### Blog

Keep abreast of events in the teaching arena, changes to the resource, and see how EducationCity is supporting the education community.



"Teachers have been delighted with the content of this package and most impressed with how easy it is to find appropriate learning and teaching resources and then to use them in a variety of ways."

#### Mark Sanderson,

Senior ICT Consultant, Herefordshire Learning and Achievement Service

### Want to find out more about EducationCity?

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