



A FREE RESOURCE PACK FROM EDUCATIONCITY

Light



Science



School Worksheets



Suitability

Light Worksheets

What Does This Pack Include?

This pack has been created by teachers, for teachers. In it, you'll find high quality Activity Sheets, their answer sheets and a selection of ThinkIts to support your students to develop their knowledge about light.

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

TUNNEL VISION	
Learning Objective: Light Notice that light is reflected from surfaces.	<ul style="list-style-type: none">• Activity Sheet• Activity Sheet with Answers
SUN BLOCK	
Learning Objective: Light Find patterns in the way that the size of shadows change.	<ul style="list-style-type: none">• Activity Sheet• Activity Sheet with Answers
LIGHTS OUT	
Learning Objective: Light Recognise that they need light in order to see things and that dark is the absence of light.	<ul style="list-style-type: none">• Activity Sheet• Activity Sheet with Answers
SUNSET	
Learning Objective: Light Recognise that they need light in order to see things and that dark is the absence of light.	<ul style="list-style-type: none">• Activity Sheet• Activity Sheet with Answers
HIGH NOON	
Learning Objective: Light Recognise that shadows are formed when the light from a light source is blocked by a solid object.	<ul style="list-style-type: none">• ThinkIt Question• ThinkIt Answer
REFLECTIVE MATERIAL	
Learning Objective: Light Notice that light is reflected from surfaces.	<ul style="list-style-type: none">• ThinkIt Question• ThinkIt Answer
SHADOW PLAY	
Learning Objective: Light Find patterns in the way that the size of shadows change.	<ul style="list-style-type: none">• ThinkIt Question• ThinkIt Answer
SHADOWS	
Learning Objective: Light Find patterns in the way that the size of shadows change.	<ul style="list-style-type: none">• ThinkIt Question• ThinkIt Answer

Light Worksheets (Continued)

MAKING A SHADOW PUPPET SHOW

Learning Objective:

Light

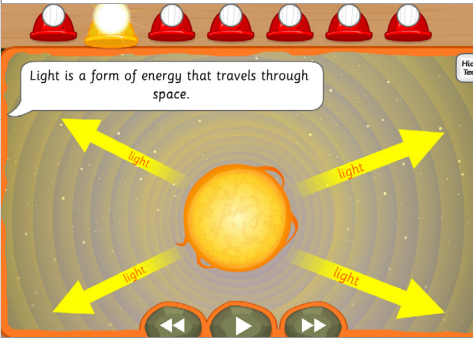

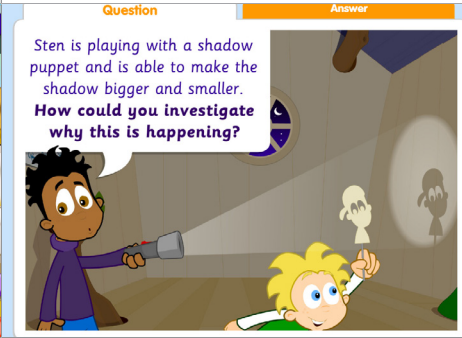
Recognise that shadows are formed when the light from a light source is blocked by a solid object.

- ThinkIt Question
- ThinkIt Answer

FINGER PUPPET CUT-OUT

Other Resources Linking to the Theme

Before deciding what to include in your lesson, check out our online content relating to light too. It's simple to find, just enter the name in EducationCity's Search tool!

Learn Screens: Introduce or Reinforce a New Concept	Activities: Educational Content	ThinkIts: Inspire Creative Ways of Thinking
Tunnel Vision Content ID: 12708 	High Noon Content ID: 926 	Shadow Play Content ID: 14123 
Explore light with your class. Look at where it comes from, and how it can be blocked and reflected.	Understand how shadows are formed with our interactive Activity.	Investigate with your class how Sten's shadow puppet can get bigger and smaller.

Enjoyed these resources?

Why not start a free trial of the full EducationCity resource and see what else we can offer you?

Email us at trials@educationcity.com
or call us on +44 (0)1572 725080!



Name: _____ Class: _____

- 1** When Manu went round a corner in the mine, Stig could hear him but he couldn't see him. Explain why.

- 2** If you have a torch and you want to make the light go round a corner, What would you do?

- 3** Fill in the gaps with the words from the box.

dark

shiny

rough

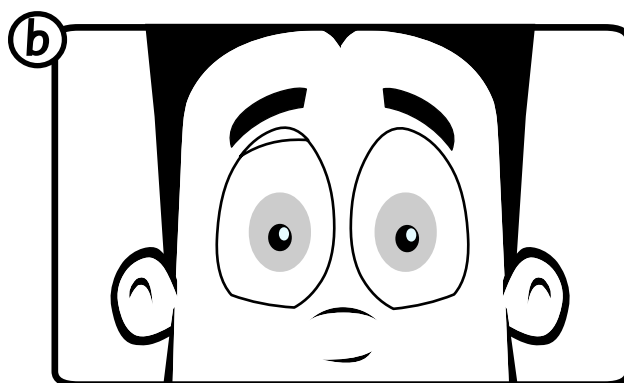
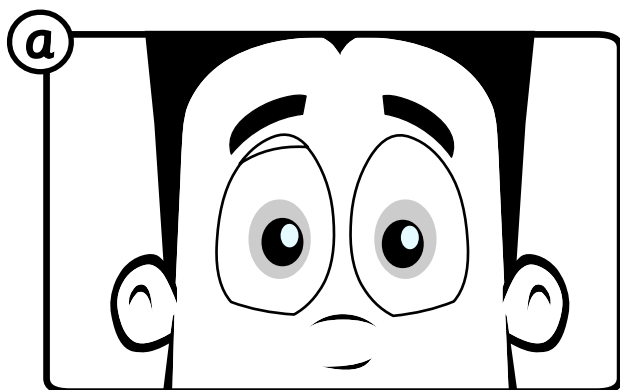
dull

bright

smooth

Light reflects well off _____, _____ and _____ surfaces.

It does not reflect very well off _____, _____ and _____ surfaces.



- 4** Above are two pictures of Manu's eyes. One shows them when he was in the tunnel and one shows them just after he got out of the tunnel. What is the difference between them?

- 5** Explain why this happens.



Name: _____ Class: _____

- 1** When Manu went round a corner in the mine, Stig could hear him but he couldn't see him. Explain why.

Sound spreads out from its source and travels in all directions.

Light only travels in straight lines.

- 2** If you have a torch and you want to make the light go round a corner, What would you do?

Use a mirror or a shiny surface to reflect the light around the corner.

- 3** Fill in the gaps with the words from the box.

dark

shiny

rough

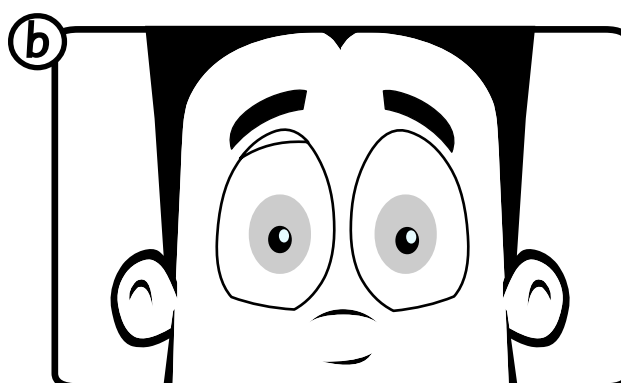
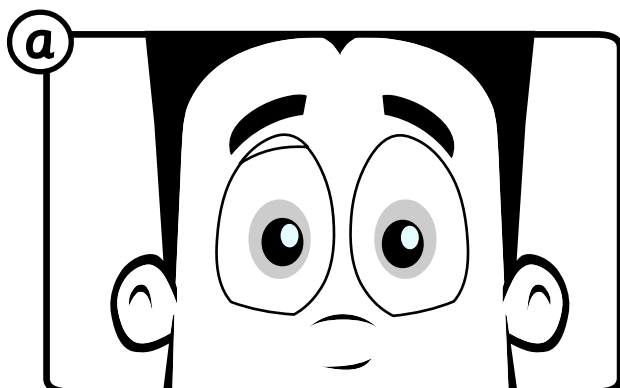
dull

bright

smooth

Light reflects well off shiny , bright and smooth surfaces.

It does not reflect very well off dark , rough and dull surfaces.



- 4** Above are two pictures of Manu's eyes. One shows them when he was in the tunnel and one shows them just after he got out of the tunnel. What is the difference between them?

The pupils in picture 'a' are larger than those in picture 'b'.

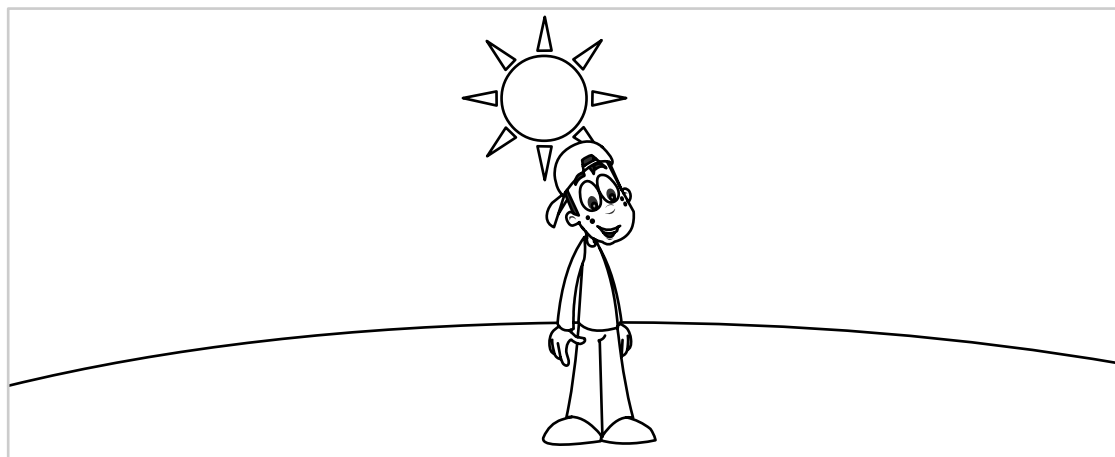
- 5** Explain why this happens.

There is less light in picture 'a' so the pupils open up to let more light in.
There is a lot of light in picture 'b' so the pupils do not need to open as much to let the light in.



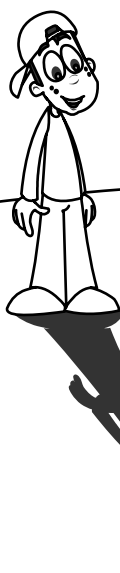
Name: _____ Class: _____

Look at the position of the Sun in the picture.
Then answer the question below.



- 1** Stig is standing under the midday sun.
Which picture shows the correct size and direction Stig's shadow casts?
Circle your answer.

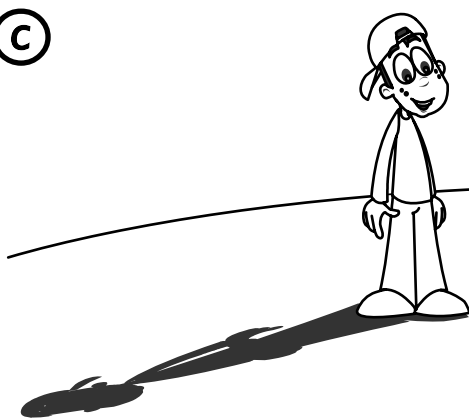
(a)



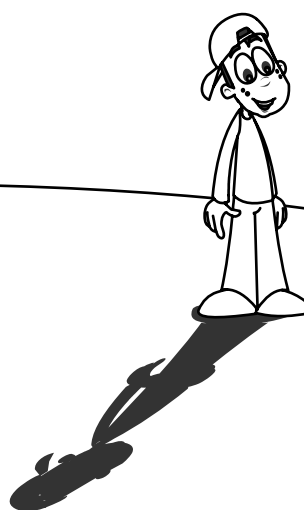
(b)



(c)



(d)

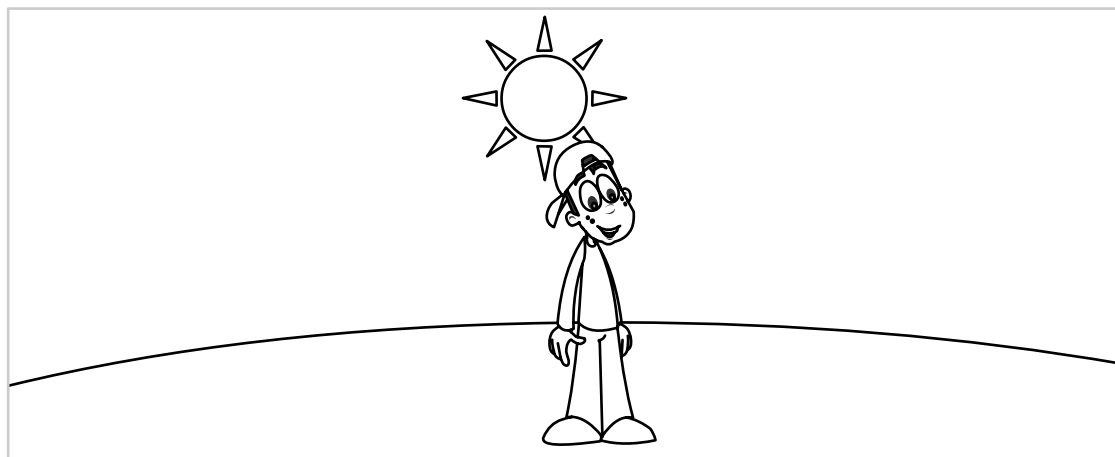


Now draw your own picture on the back of this piece of paper.
Position the Sun in the sky where you want it.
Then draw a tree or flag pole with its shadow cast in the right direction and length.



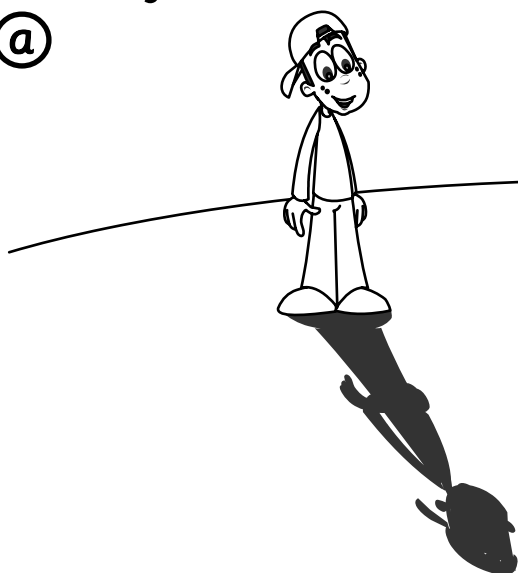
Name: _____ Class: _____

Look at the position of the Sun in the picture.
Then answer the question below.

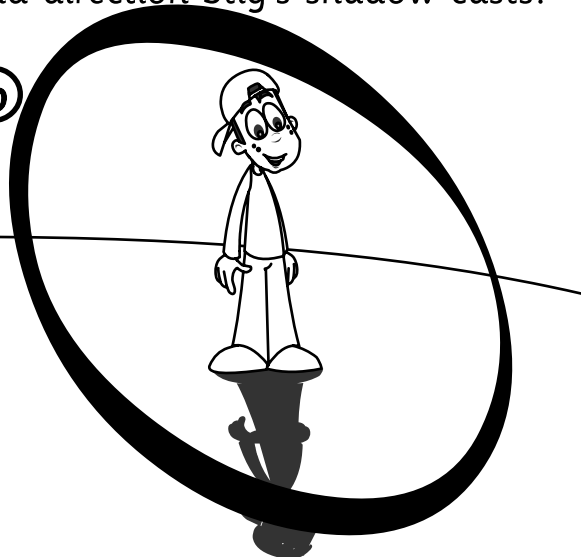


- 1** Stig is standing under the midday sun.
Which picture shows the correct size and direction Stig's shadow casts?
Circle your answer.

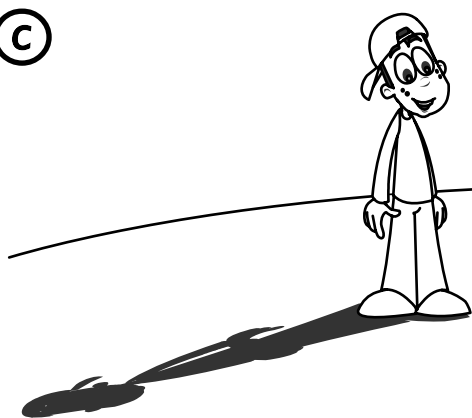
(a)



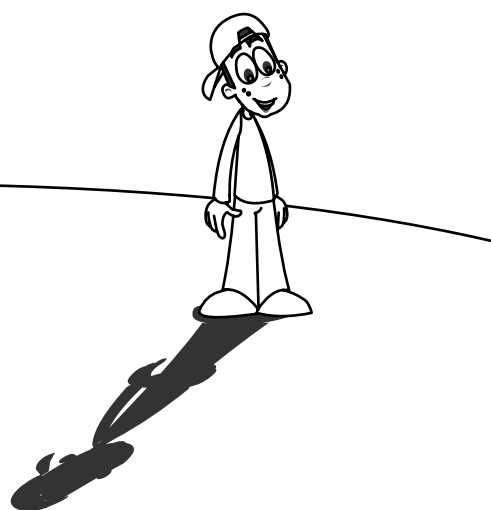
(b)



(c)



(d)

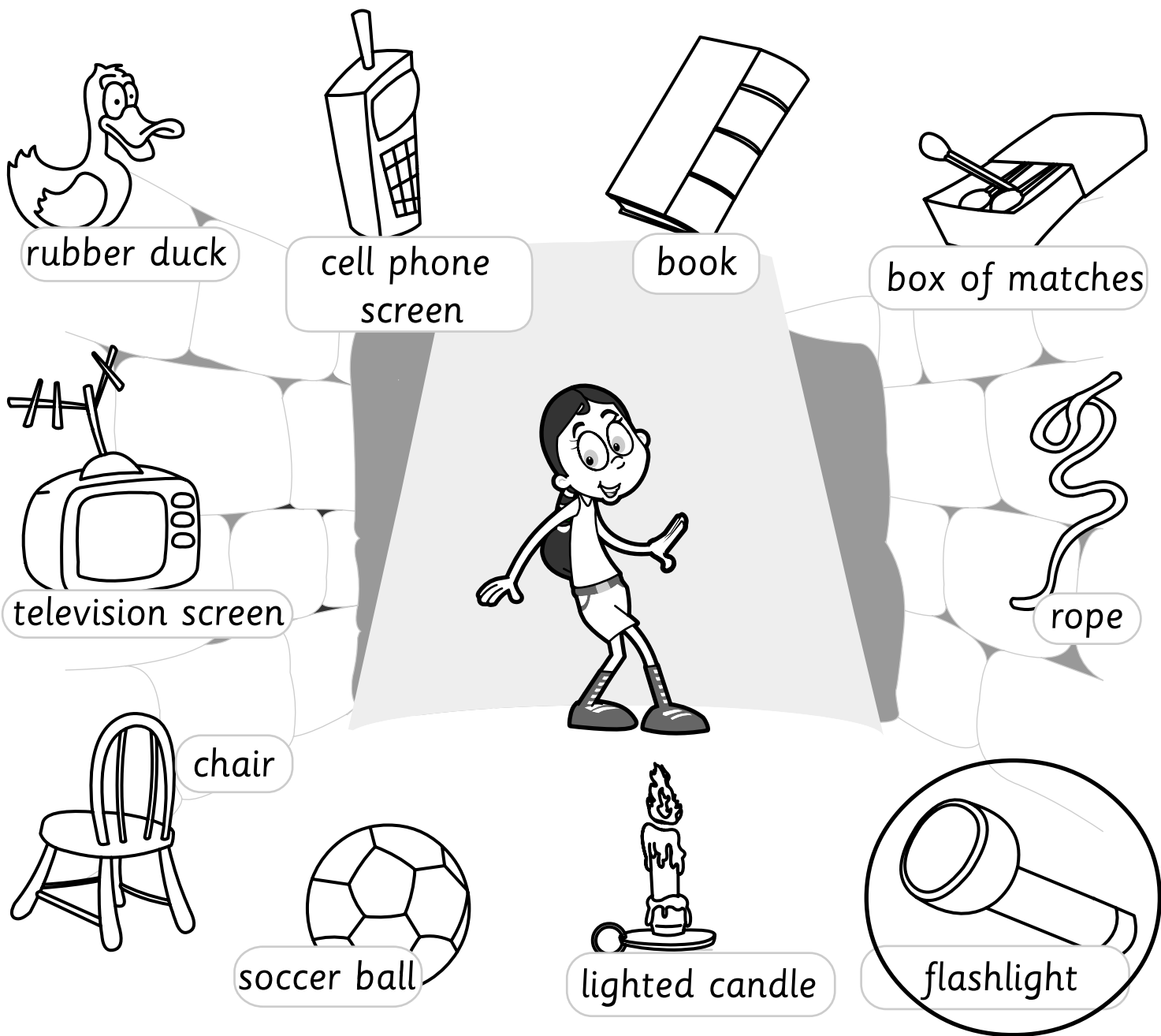


Now draw your own picture on the back of this piece of paper.
Position the Sun in the sky where you want it.
Then draw a tree or flag pole with its shadow cast in the right direction and length.



Name: _____ Class: _____

Circle all of the light sources in the picture below.
One has been done for you.



Read the question and circle the correct answer.

Where does all of our daylight come from?

electric lights

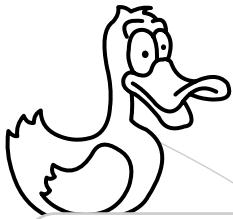
sunlight

the sky

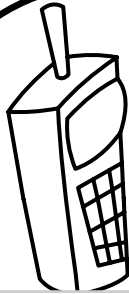


Name: _____ Class: _____

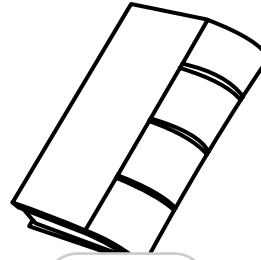
Circle all of the light sources in the picture below.
One has been done for you.



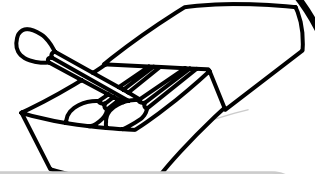
rubber duck



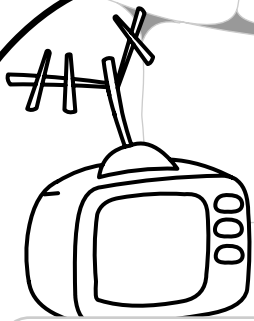
cell phone
screen



book



box of matches



television screen



rope



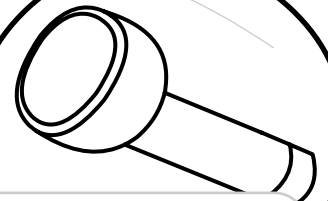
chair



soccer ball



lighted candle



flashlight

Read the question and circle the correct answer.

Where does all of our daylight come from?

electric lights

sunlight

the sky



Name: _____ Class: _____

Use the key to help you colour in the right picture for each item. One has been done for you.

key:



= not a light source

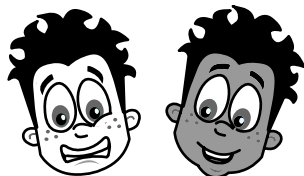


= a light source

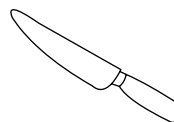
1



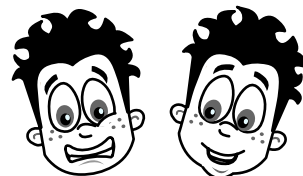
candle



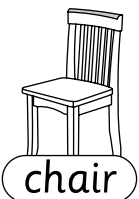
8



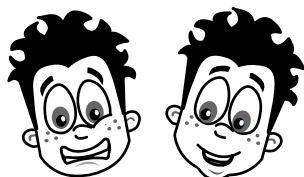
knife



2



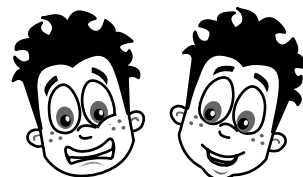
chair



9



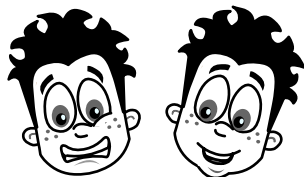
pumpkin



3



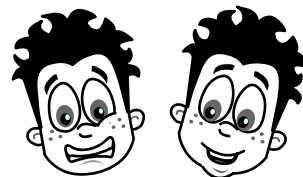
fire



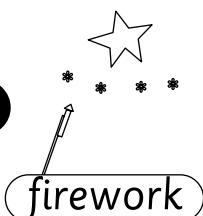
10



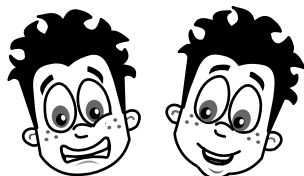
spotlight



4



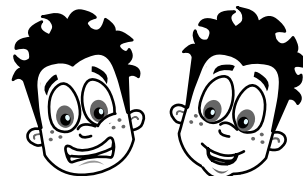
firework



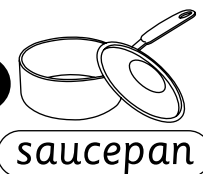
11



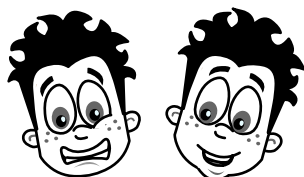
window



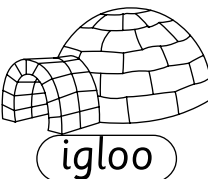
5



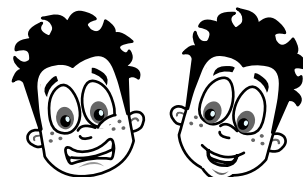
saucepan



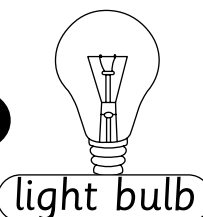
12



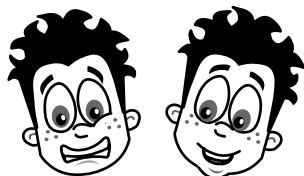
igloo



6



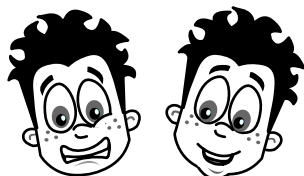
light bulb



7



dog





Name: _____ Class: _____

Use the key to help you colour in the right picture for each item. One has been done for you.

key:



= not a light source

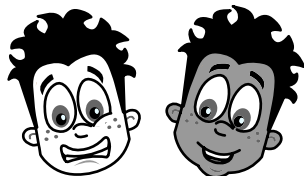


= a light source

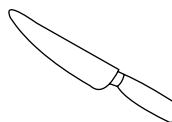
1



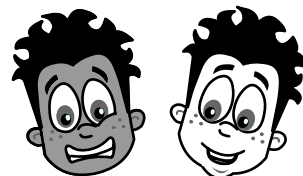
candle



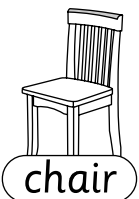
8



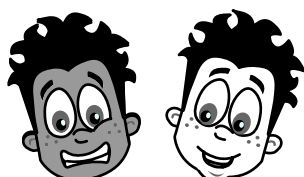
knife



2



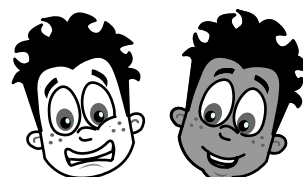
chair



9



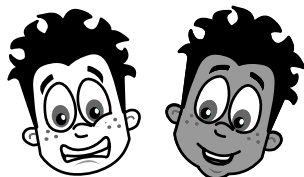
pumpkin



3



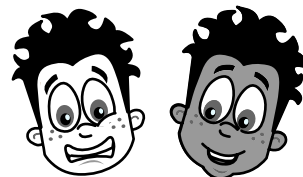
fire



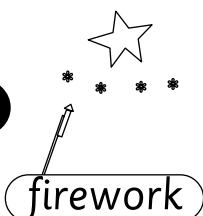
10



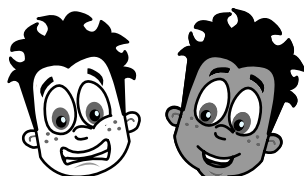
spotlight



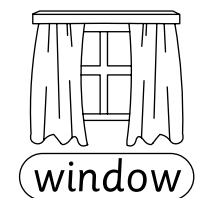
4



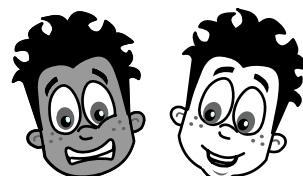
firework



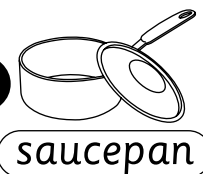
11



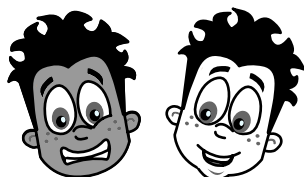
window



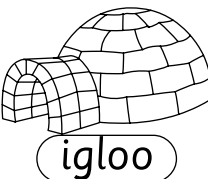
5



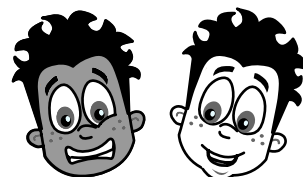
saucepan



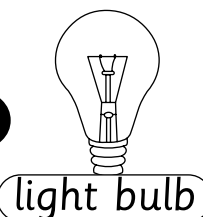
12



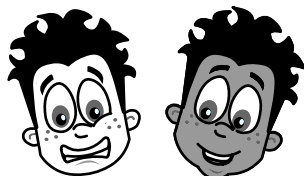
igloo



6



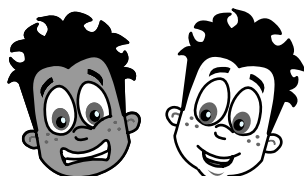
light bulb



7



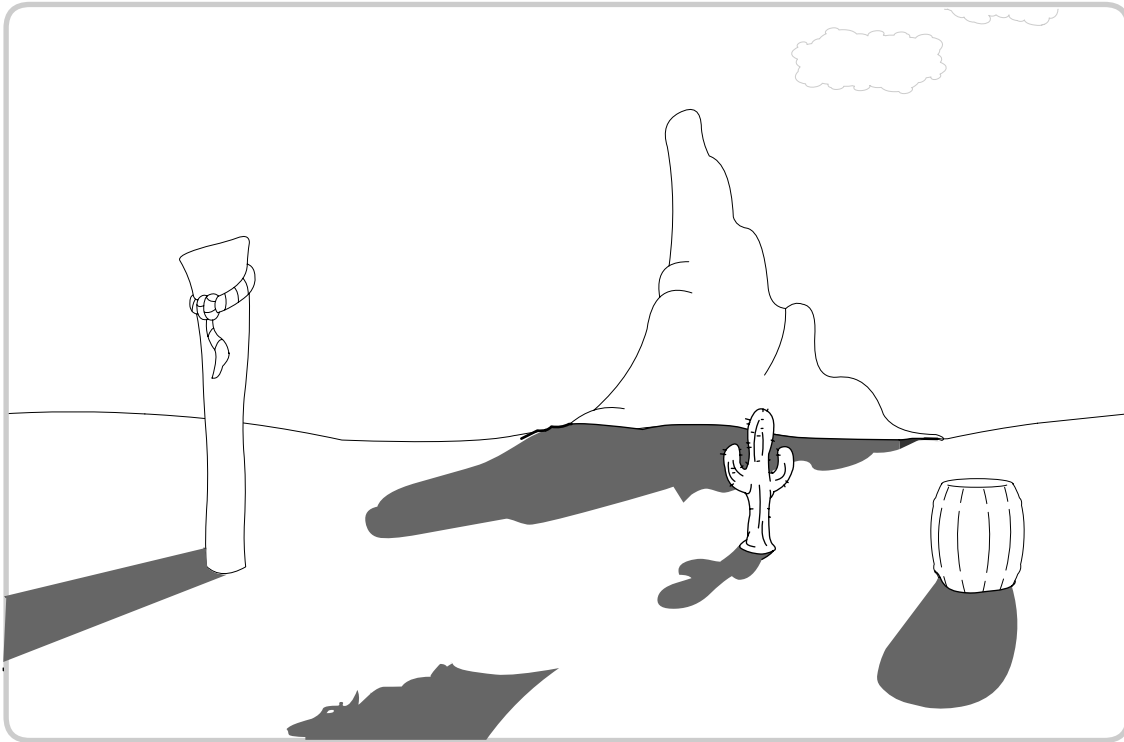
dog





Name: _____ Class: _____

Look at the drawing below. It shows lots of shadows but where should the sun go? Draw the sun in the correct place in the sky.



Now use the words in the boxes to fill in the gaps below.

- 1 When the sun is in the east your shadow is pointing _____ .
- 2 Your _____ is _____ at midday.
- 3 The sun rises in the _____ and sets in the _____ .
- 4 Shadows are at their longest at _____ and _____ .
- 5 Your shadow is made because your _____ blocks _____ from the _____ .
- 6 Shadows are _____ when an object is _____ to the light source.

light

sun

shortest

sunset

body

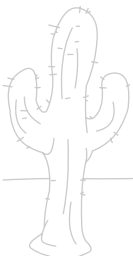
west

east

bigger

sunrise

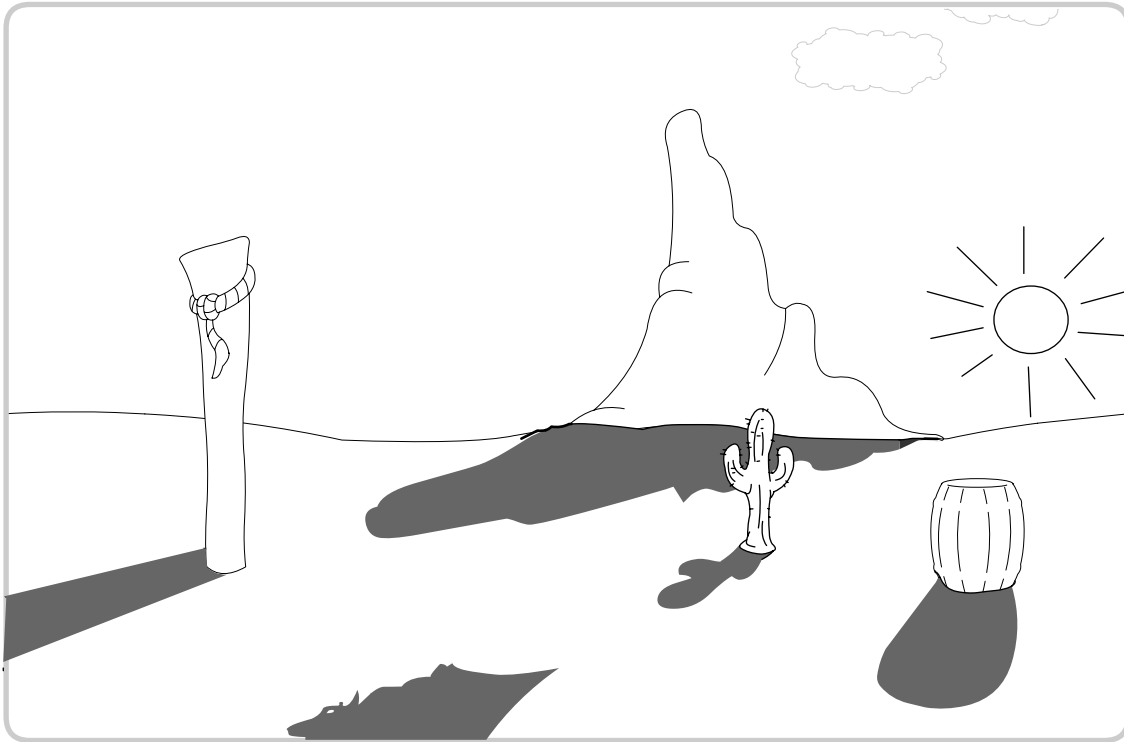
nearer





Name: _____ Class: _____

Look at the drawing below. It shows lots of shadows but where should the sun go? Draw the sun in the correct place in the sky.



Now use the words in the boxes to fill in the gaps below.

- 1 When the sun is in the east your shadow is pointing west.
- 2 Your shadow is shortest at midday.
- 3 The sun rises in the east and sets in the west.
- 4 Shadows are at their longest at sunrise and sunset.
- 5 Your shadow is made because your body blocks light from the sun.
- 6 Shadows are bigger when an object is nearer to the light source.

light

sun

shortest

sunset

body

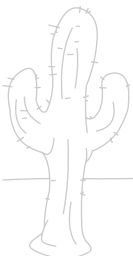
west

east

bigger

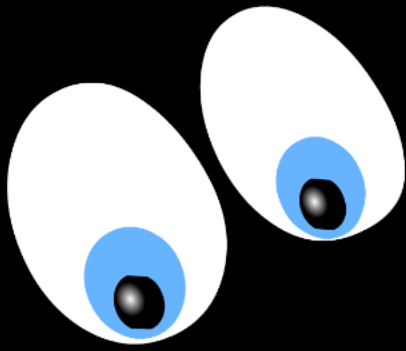
sunrise

nearer



Name : _____

Class: _____



I need to wear my coat with reflective strips when I am out in the dark.

Talk to your partner about why.

Name : _____

Class: _____

We can only see a shiny object if a light is shone on it. Car headlights will make your coat shine.

What else will help people see you in the dark?



Name : _____

Class: _____

Sten is playing with a shadow puppet and is able to make the shadow bigger and smaller.
How could you investigate why this is happening?

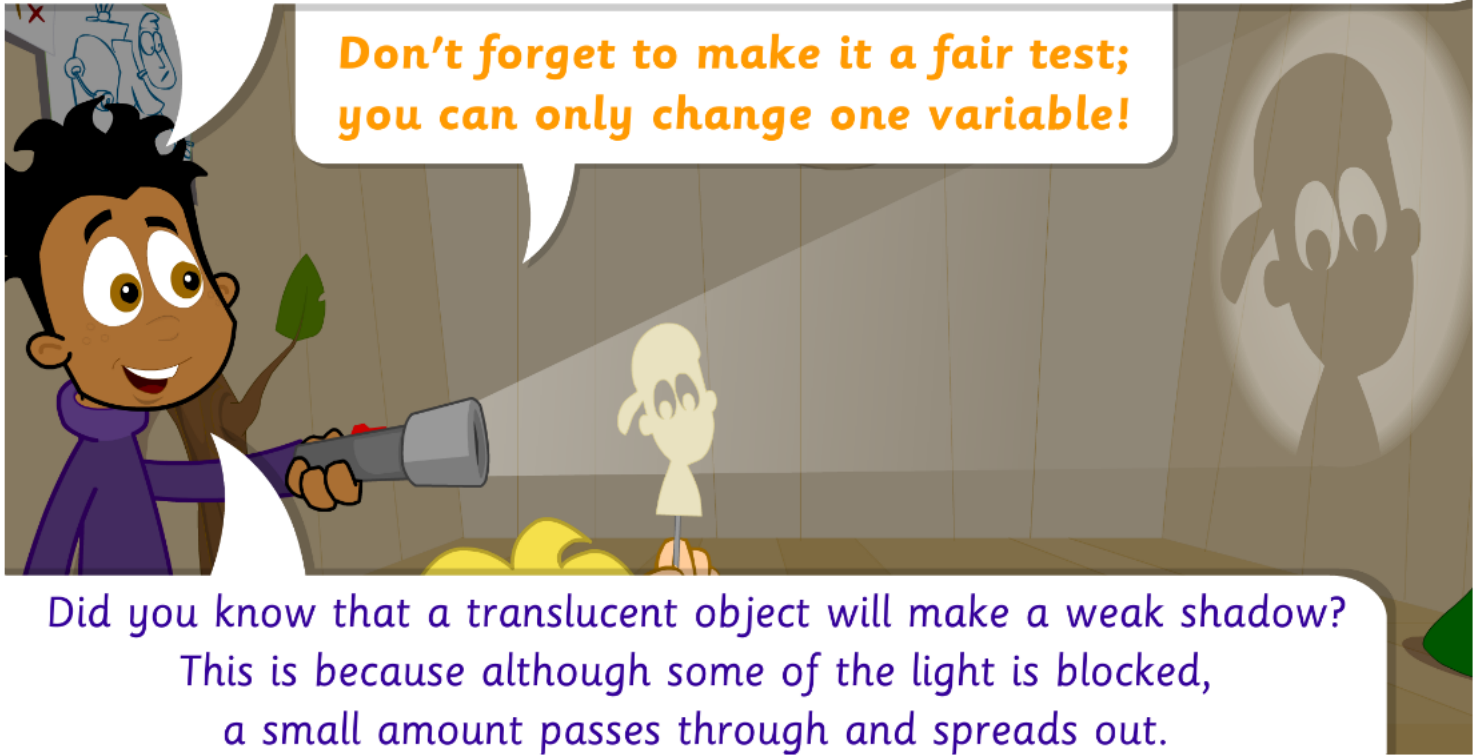


Name : _____

Class: _____

There are a few things we thought of. We could:

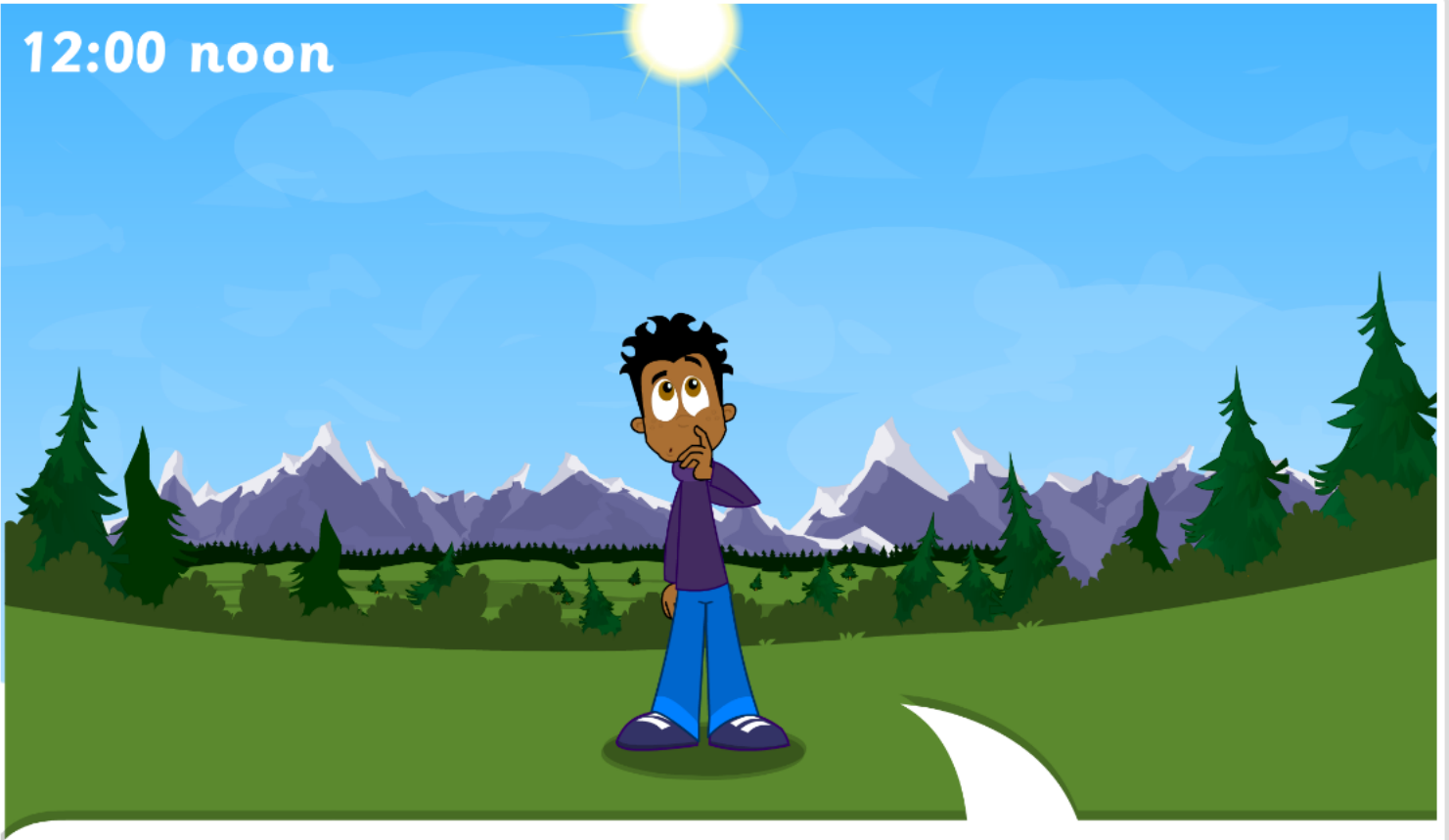
- Move the puppet nearer the wall and measure the size of the shadow
- Move the puppet further from the wall and measure its new size
- Change the distance that the puppet is held from the light source



Name : _____

Class: _____

12:00 noon



The time is 12 noon. How will the length of my shadow change during the afternoon?

Name : _____

Class: _____

4:00 pm

My shadow will get longer during the afternoon.

Was that your prediction, too?

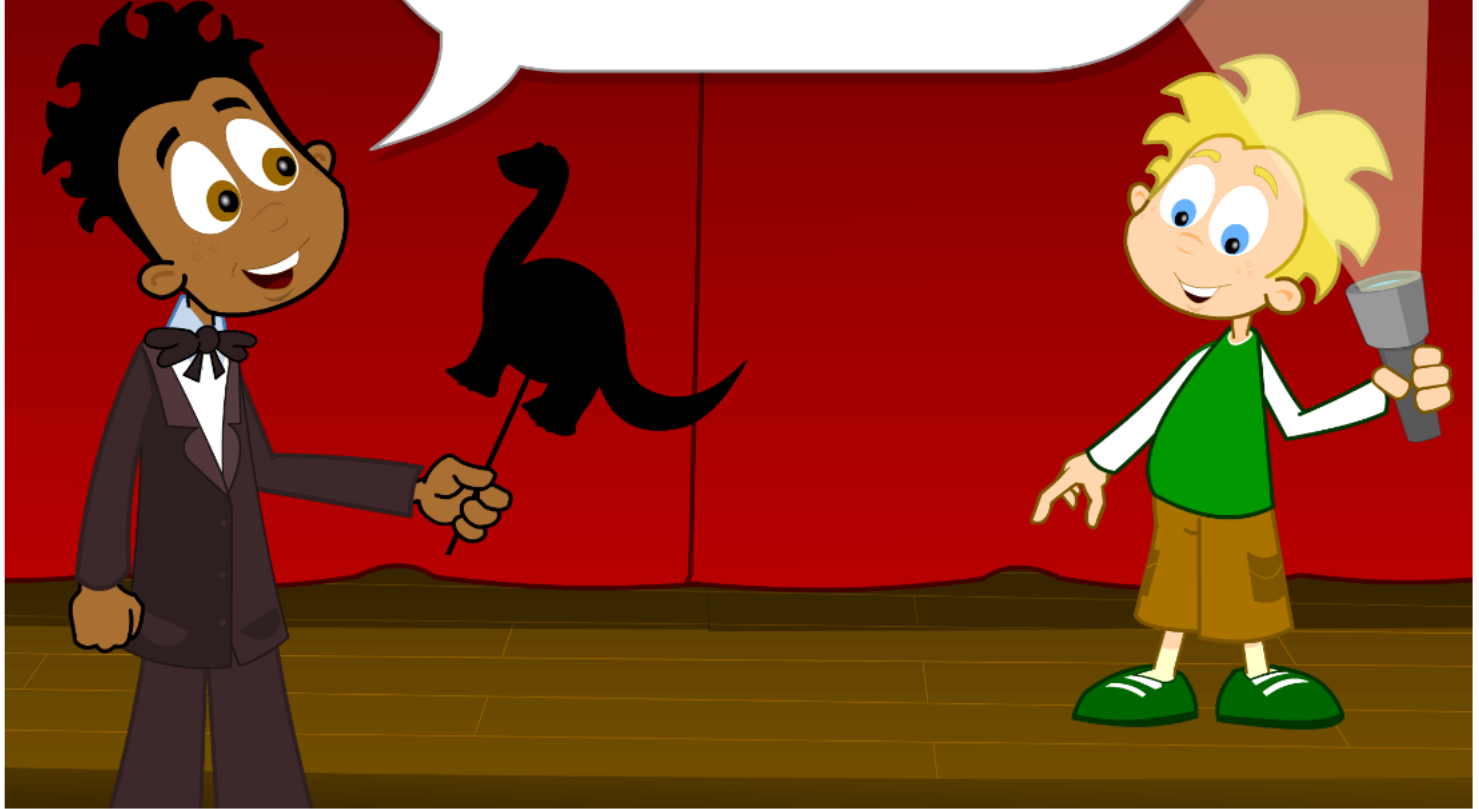


How could you collect and record this information?

Name : _____

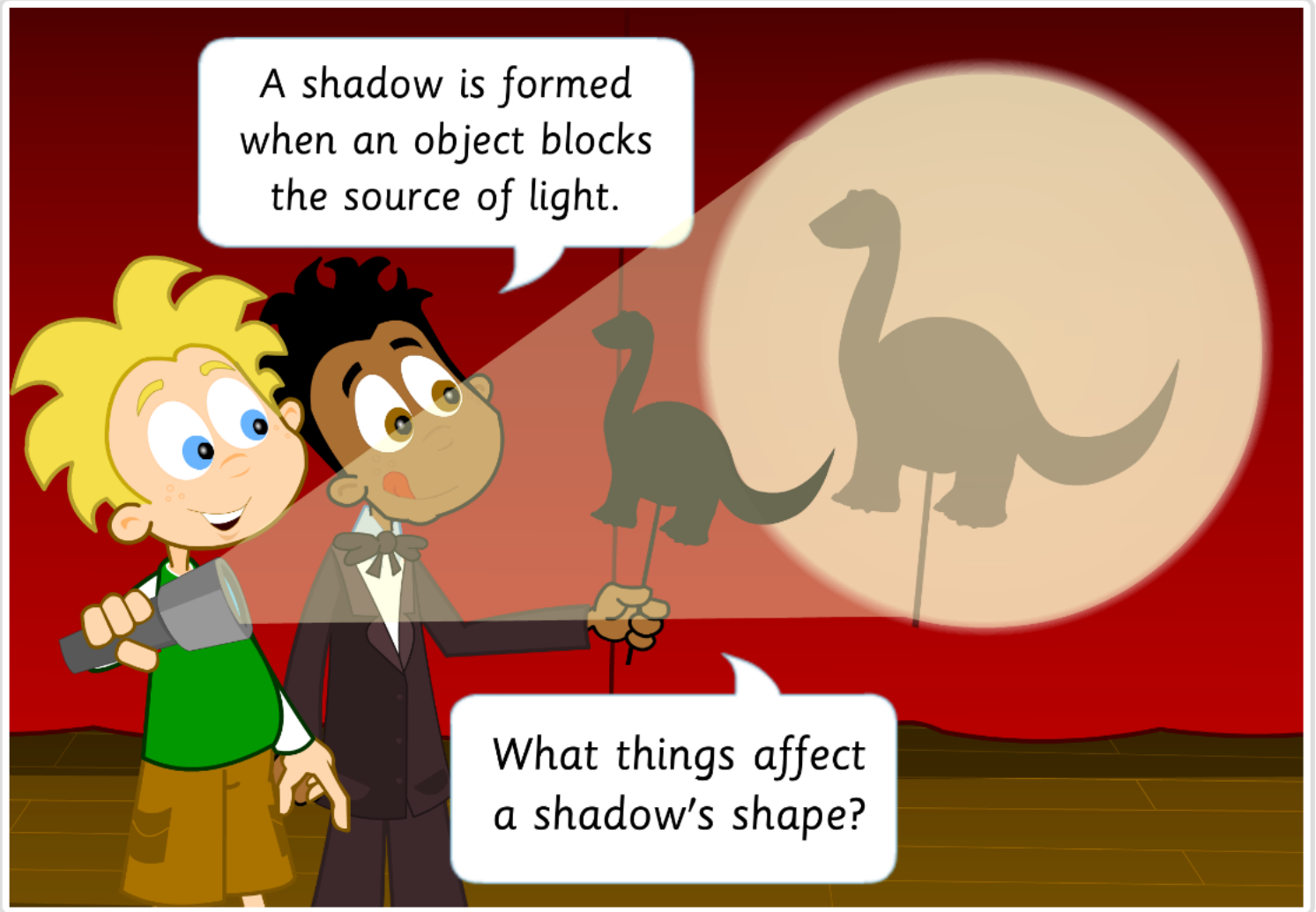
Class: _____

I'm making a shadow puppet show! What do I need to do to make it work?



Name : _____

Class: _____





ACTIVITY

Fairy Tale Finger Puppet Cut-Out



**Craft
Project**

Fairy Tale Finger Puppet Cut-Out



Use these cut-out characters and images to create your very own magical stories. Simply cut these out along the dotted lines and let the fun commence!

You will need:

- A printer
- Paper or thin card to print on
- Colouring pencils
- Scissors
- Glue or sticky tape

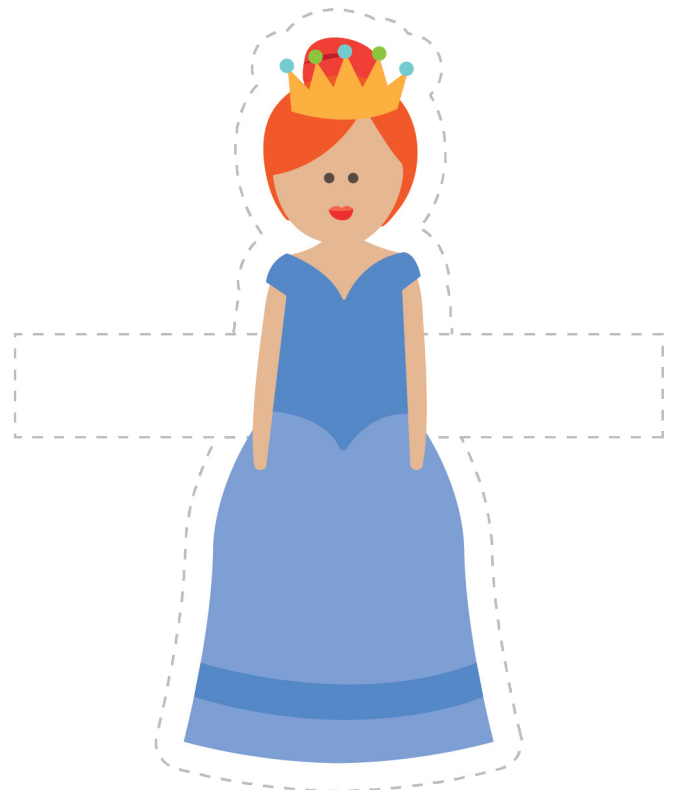
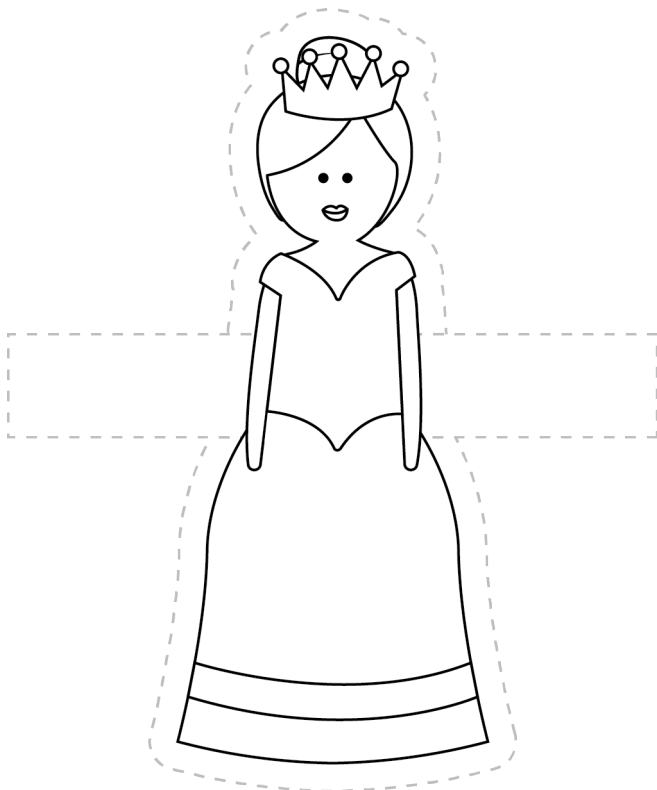
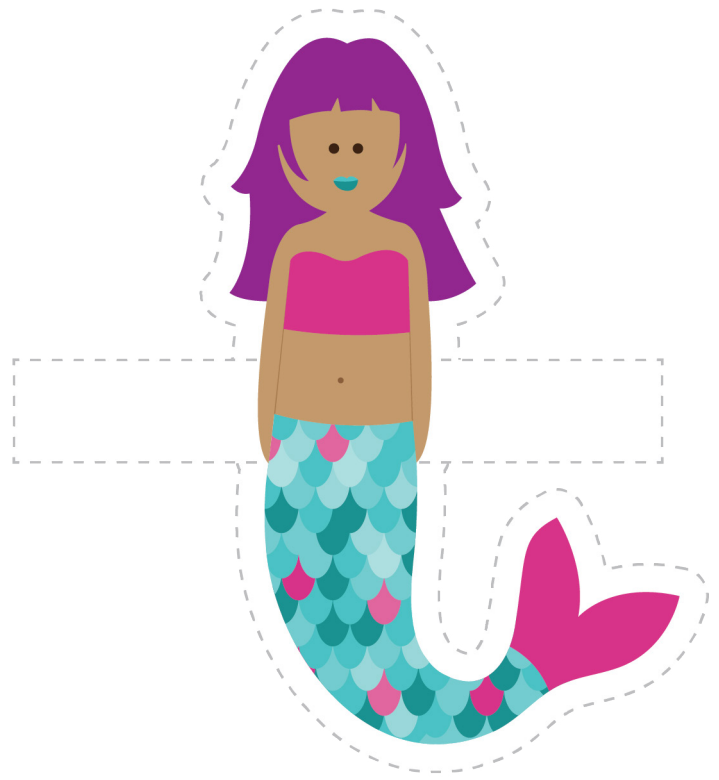
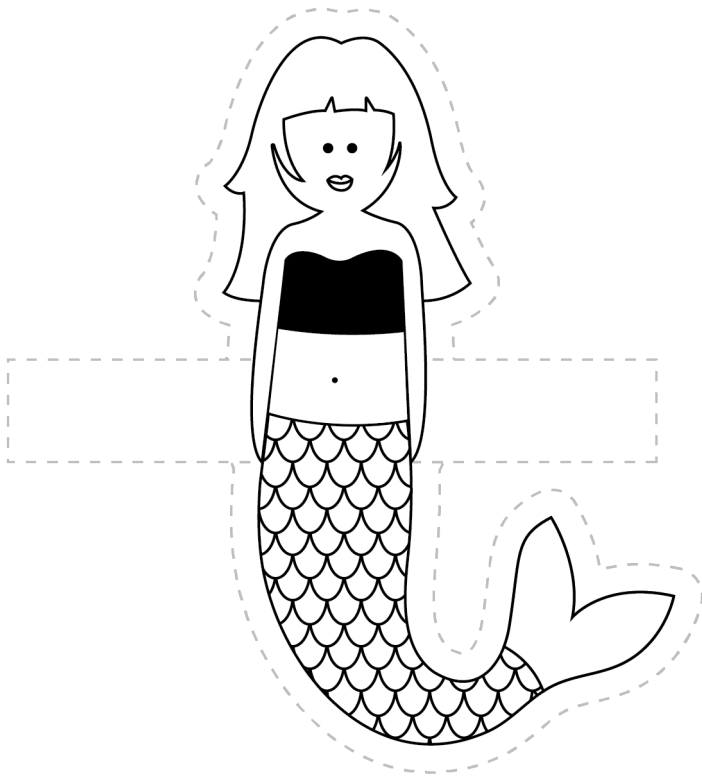
Important:

Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!

Instructions:

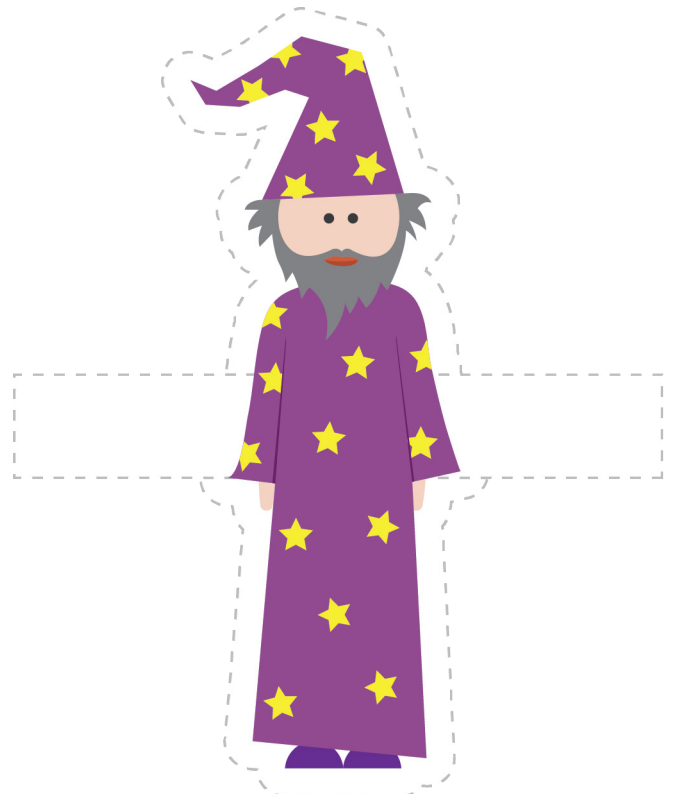
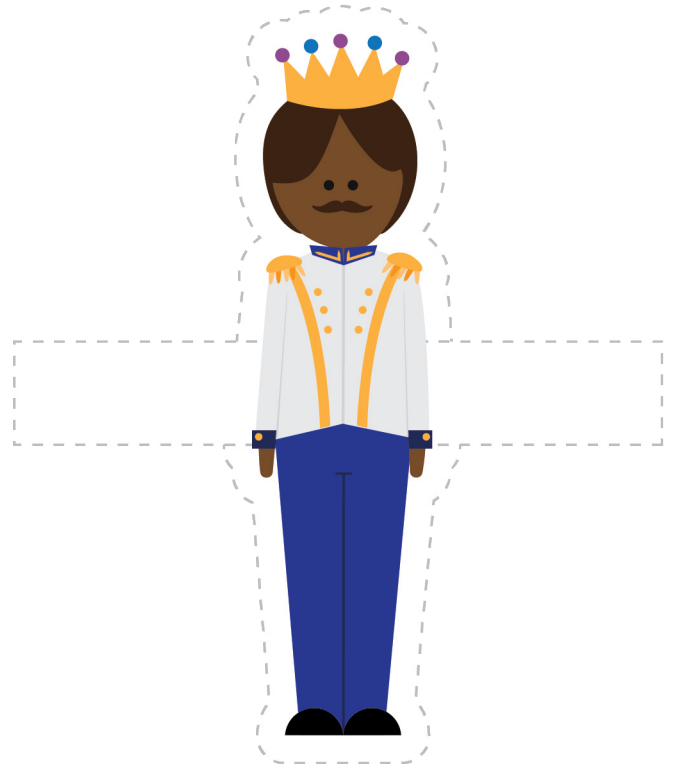
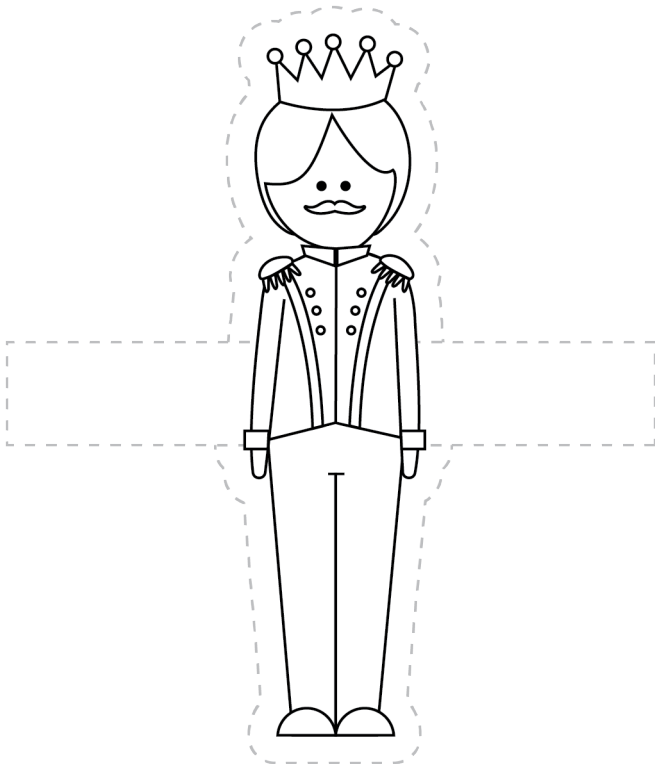
1. Print out the characters and props onto paper or thin card.
2. Carefully cut around each element, following the dotted lines as a guide.
3. For the props, fold the tab at the bottom, so the props stand up.
4. For the characters, fold the tabs around your finger and stick using glue or sticky tape.
5. Use the characters and props to create your very own mystical and wondrous story!

Fairy Tale Finger Puppet Cut-Out



Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!

Fairy Tale Finger Puppet Cut-Out

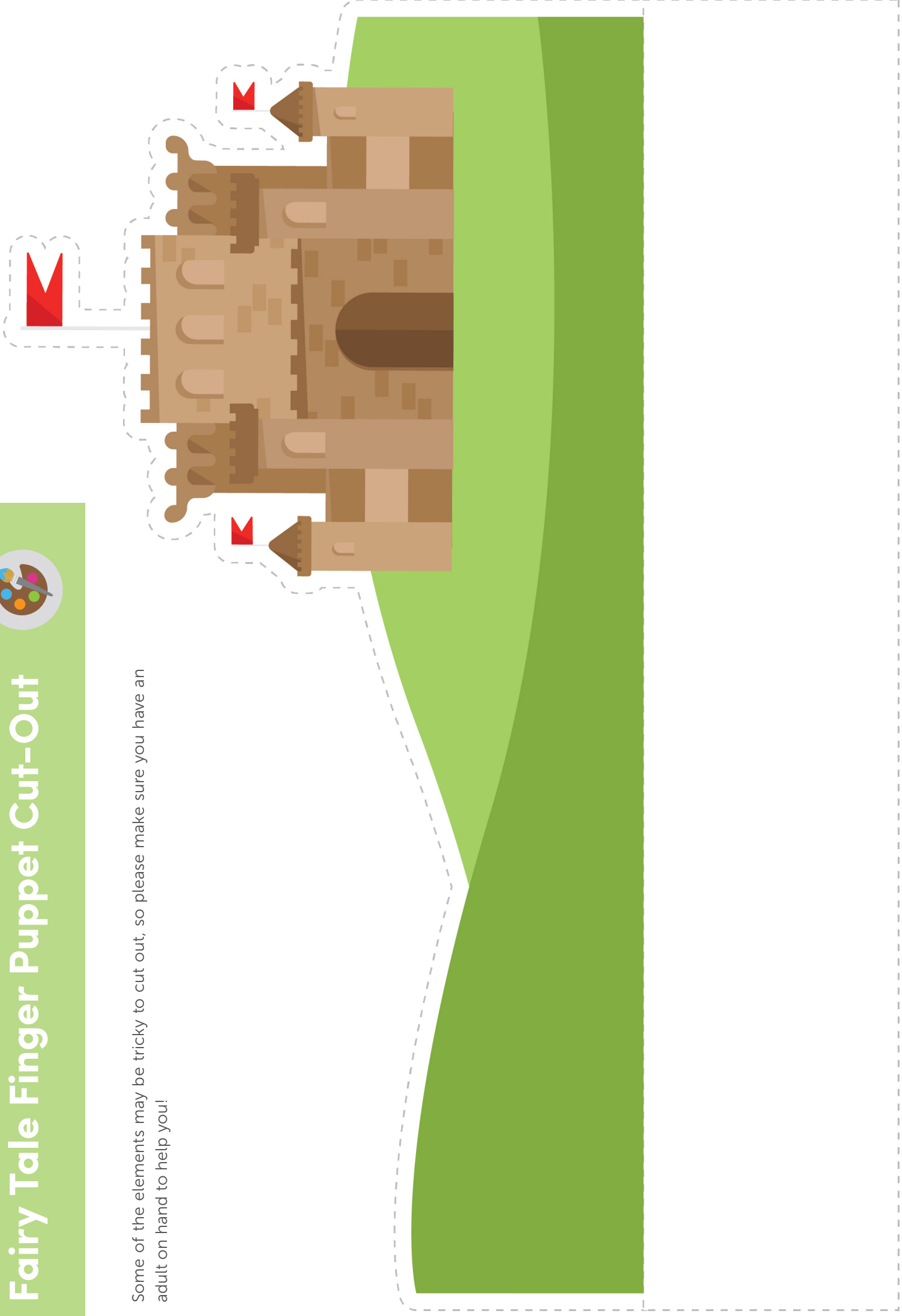


Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!

Fairy Tale Finger Puppet Cut-Out



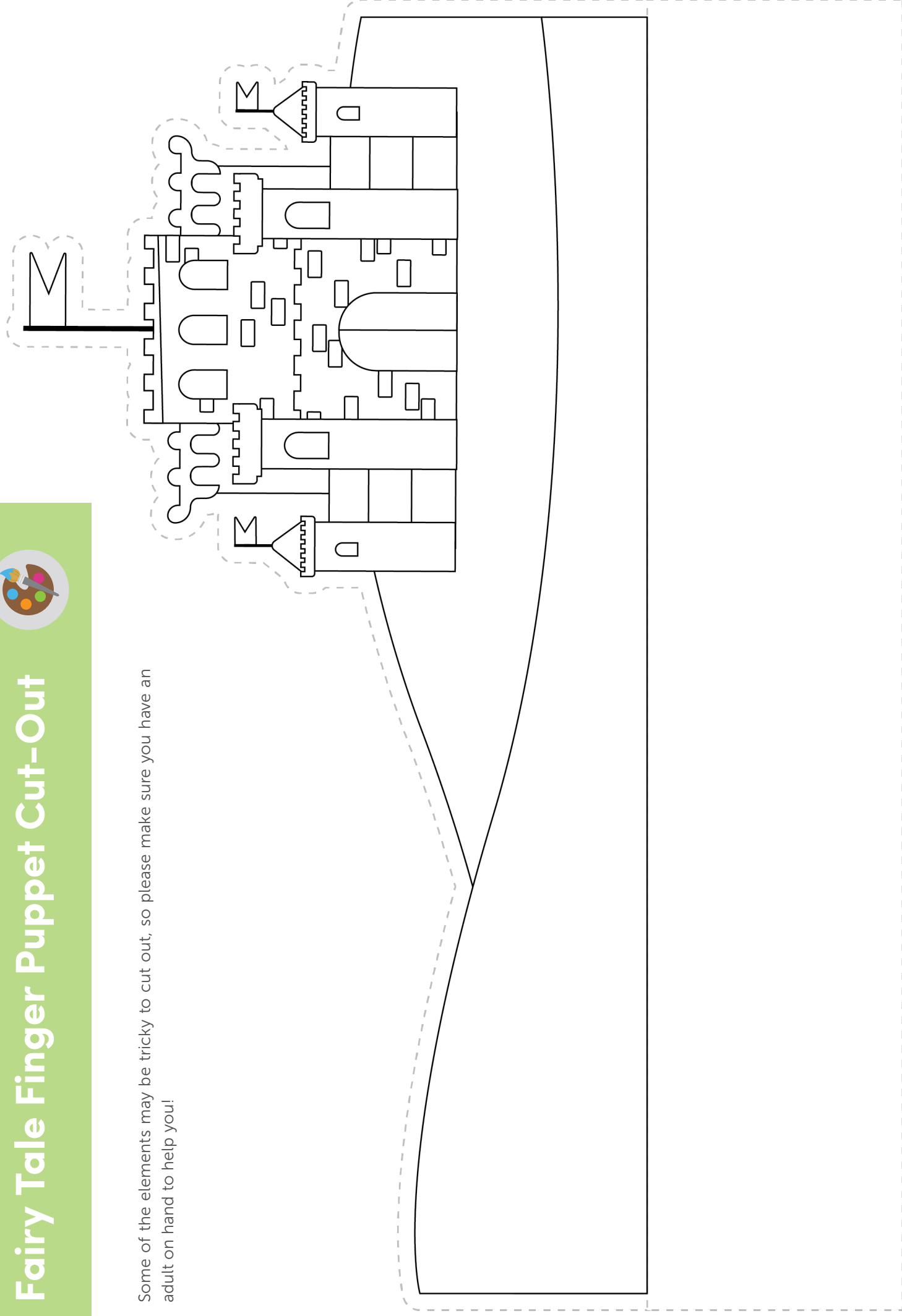
Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!



Fairy Tale Finger Puppet Cut-Out



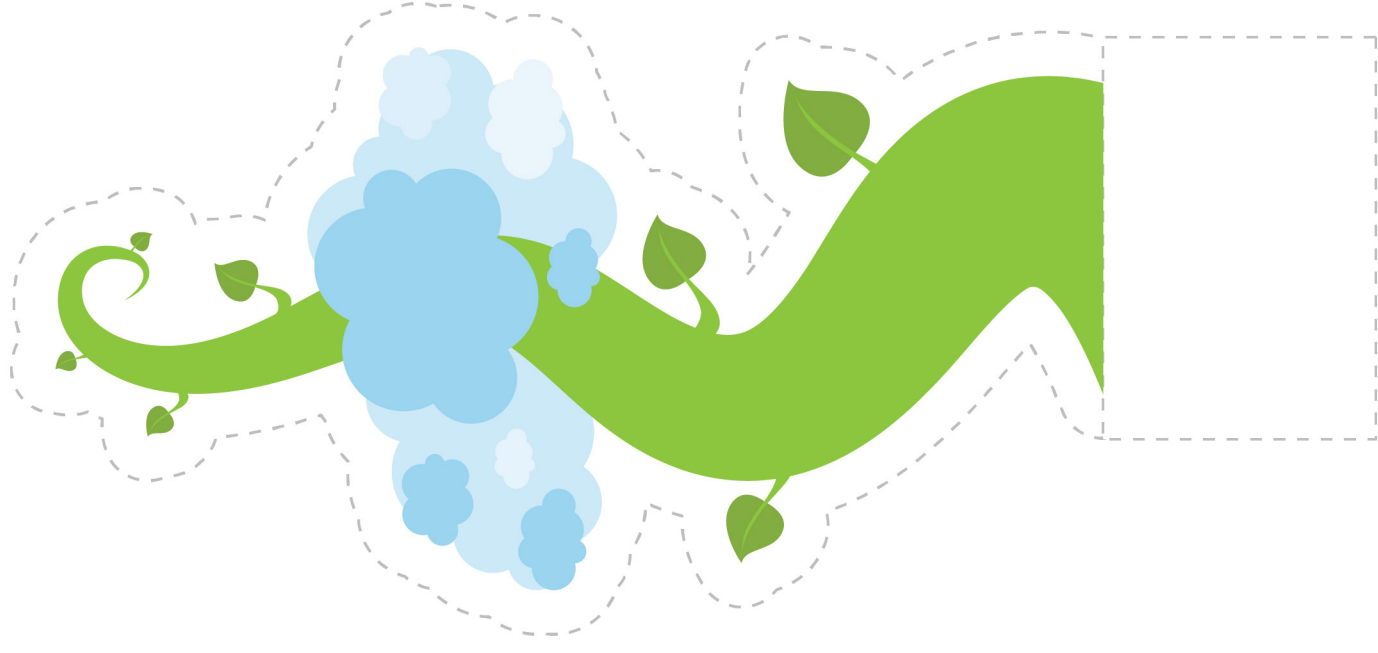
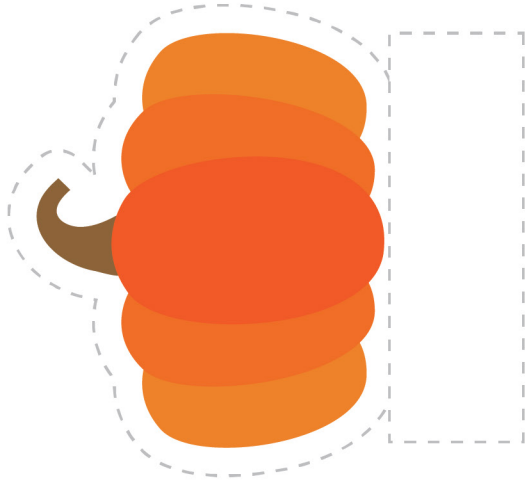
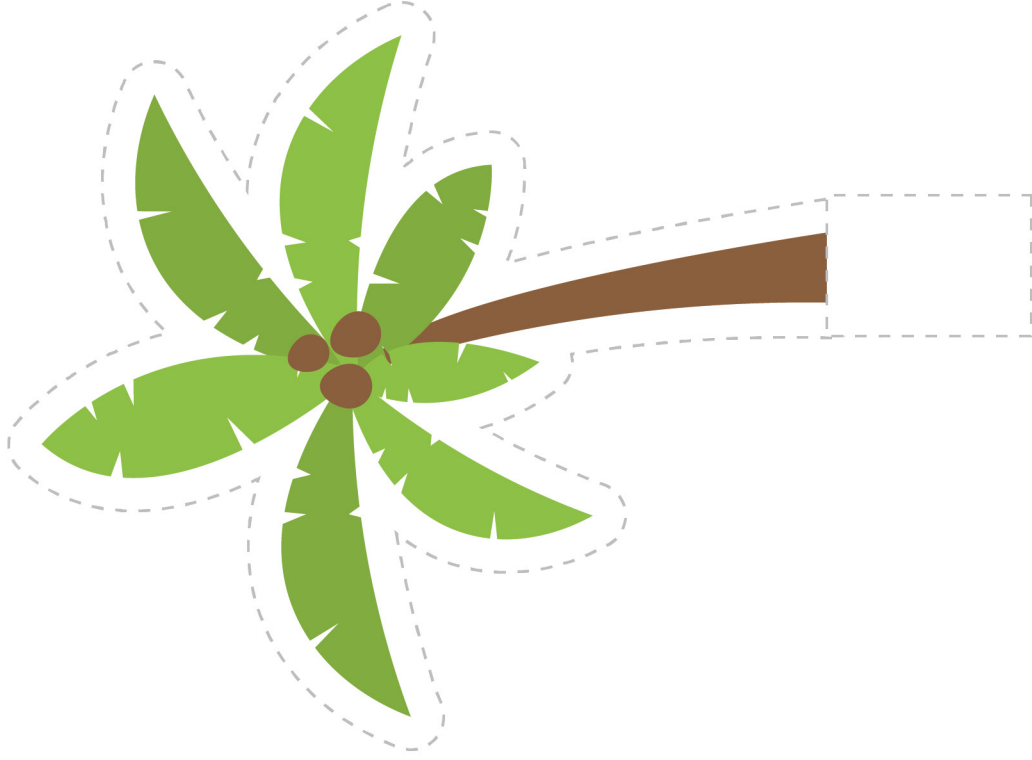
Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!



Fairy Tale Finger Puppet Cut-Out



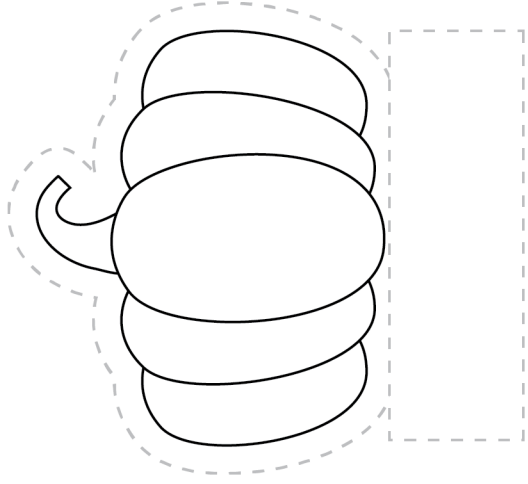
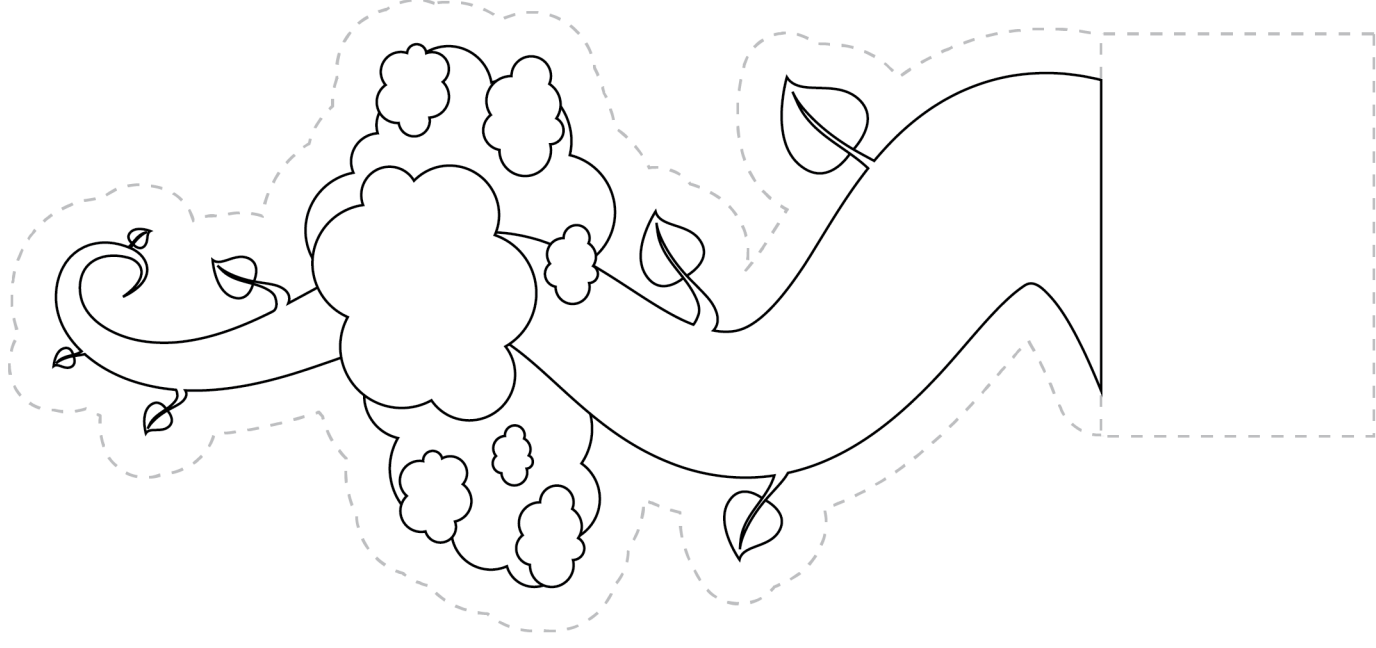
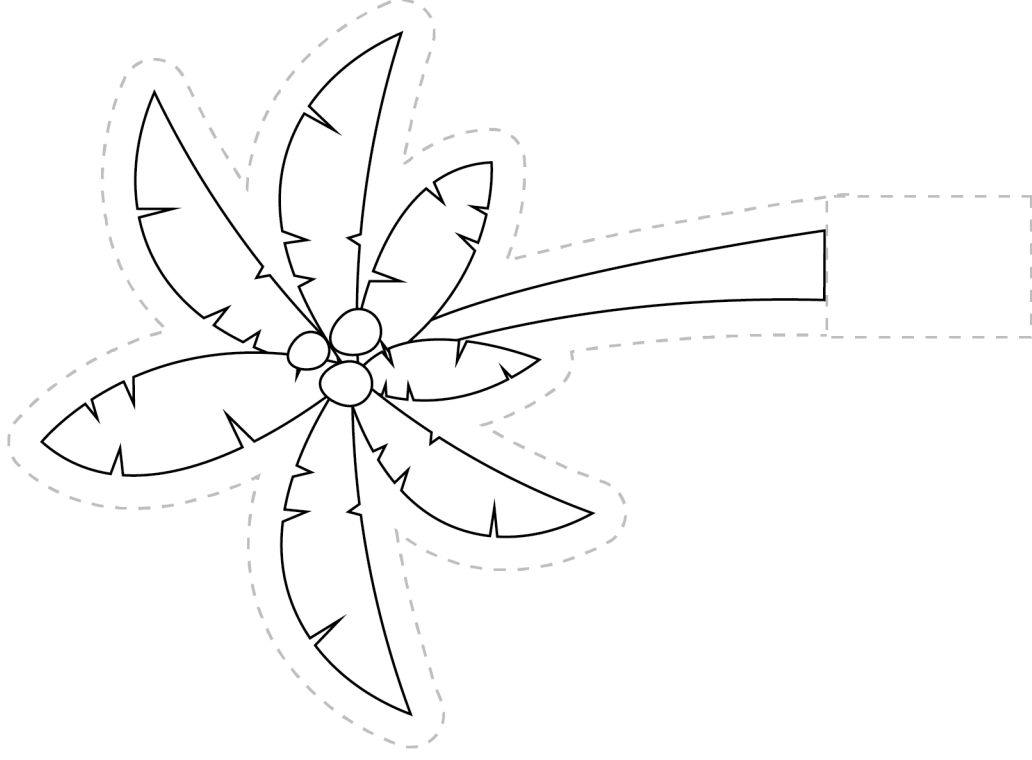
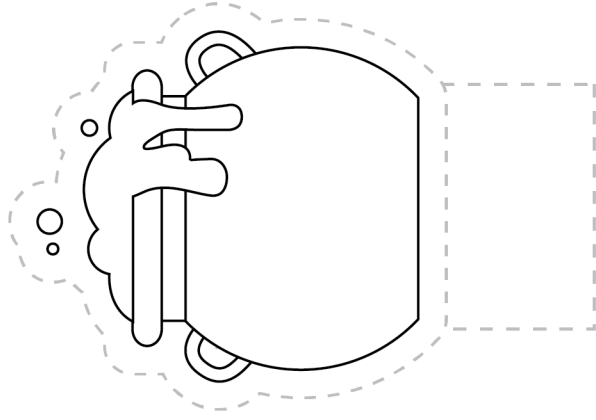
Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!



Fairy Tale Finger Puppet Cut-Out



Some of the elements may be tricky to cut out, so please make sure you have an adult on hand to help you!



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!



Differentiated Teaching

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.



Flexible Learning

EducationCity is accessible via desktops, laptops, tablets and whiteboards, so can support you whatever equipment is available in your classroom.



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?

Start a free trial for your school today and see it for yourself. Simply call us on +44 (0)1572 725080 or email trials@educationcity.com to arrange.

Website: www.educationcity.com
Email: trials@educationcity.com