

Storyboard 1

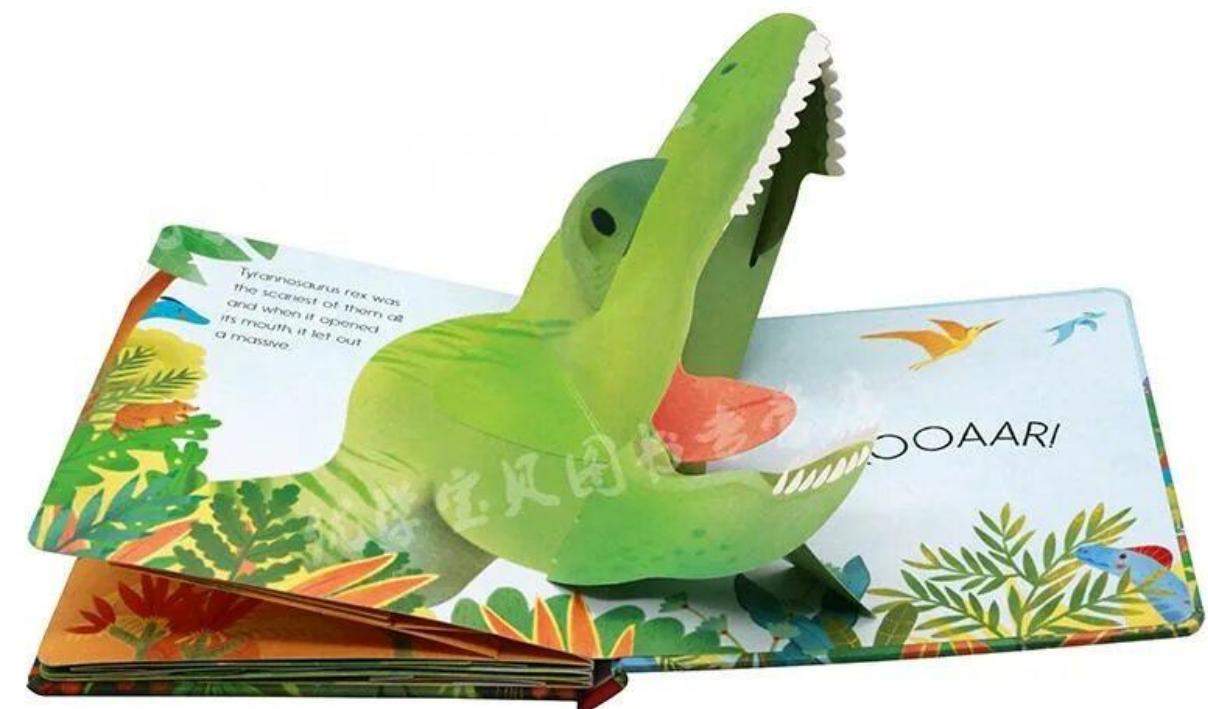
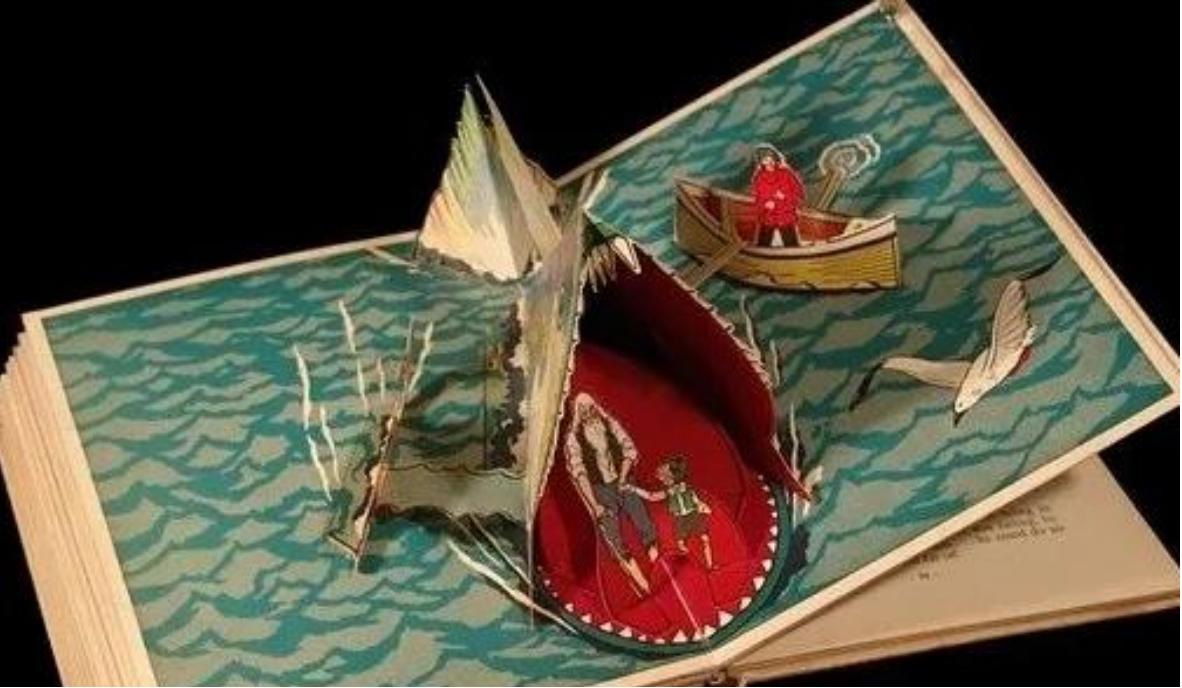
故事书 1

Sliding Mechanism

滑动 机制

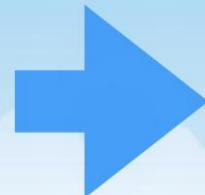
Huádòng jīgòu





Here is a picture that uses a **sliding mechanism**.

Sliding Mechanism



滑动机制

Huádòng jīgòu

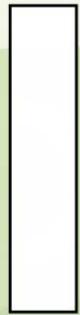
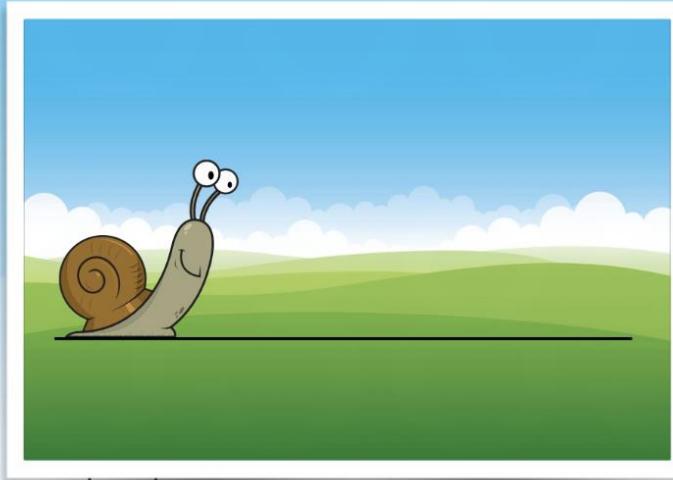
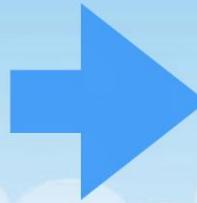
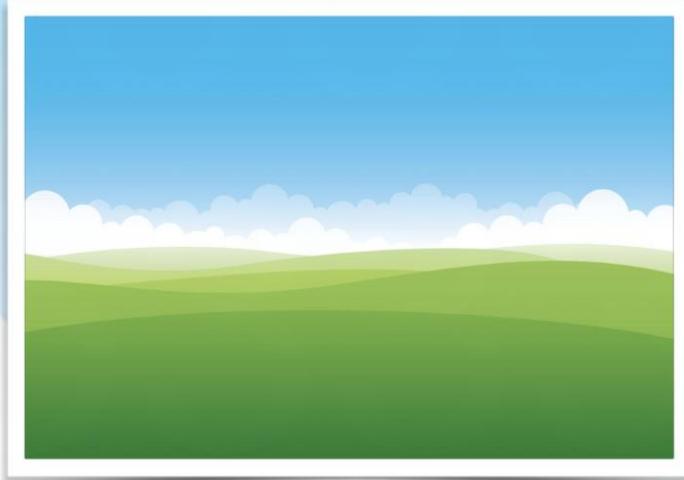
How have I moved from one position to another in these two pictures?



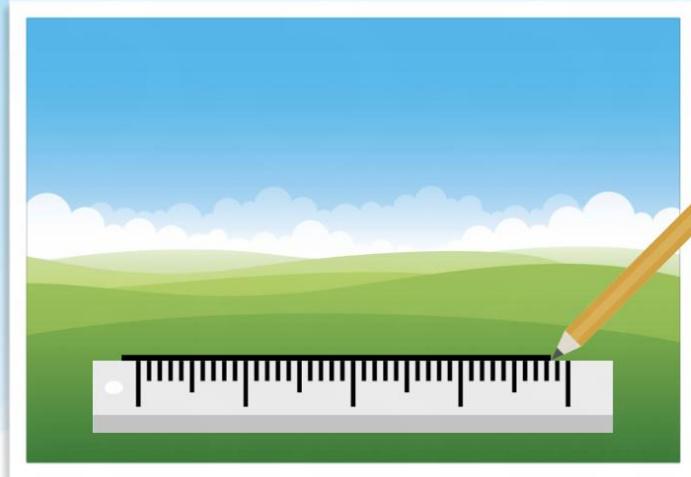
k

Nex

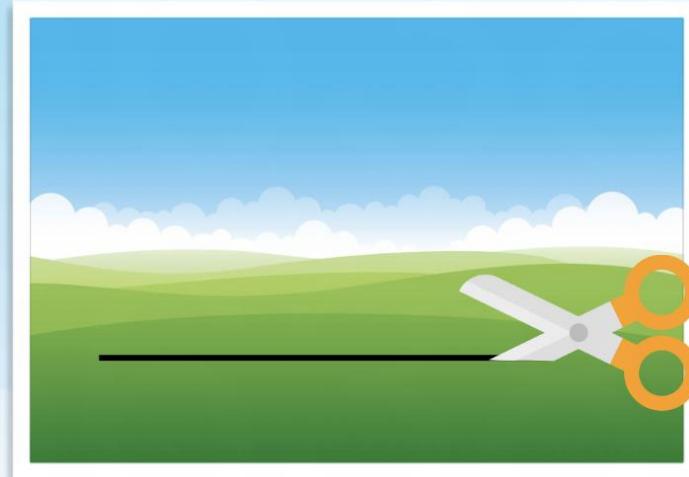
Here is the equipment that was used to make this moving picture:



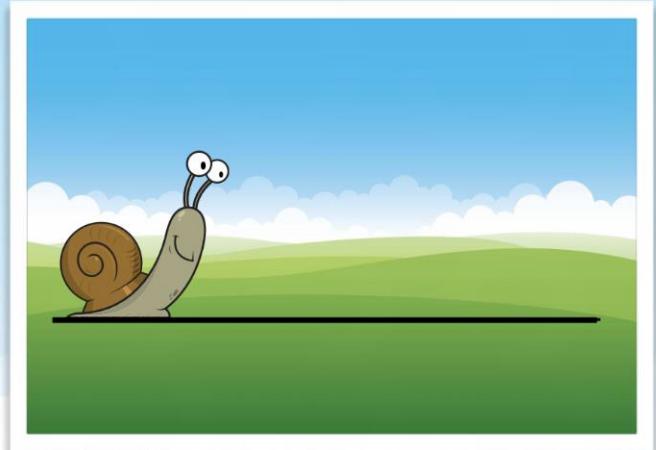
Can you explain how
this moving picture
was made?



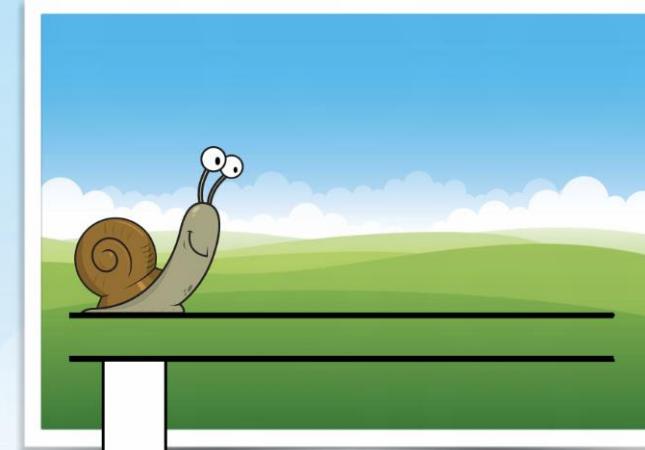
1. Draw a straight line on the background scene to show where you want the snail to move from and to.



2. Use scissors to carefully cut along the line you have drawn to create a slot.



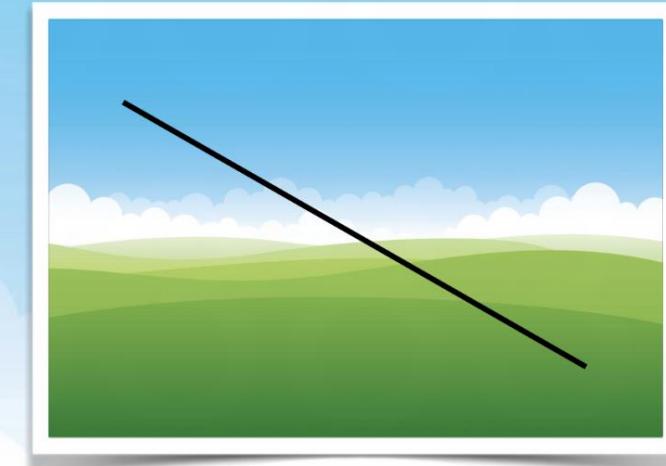
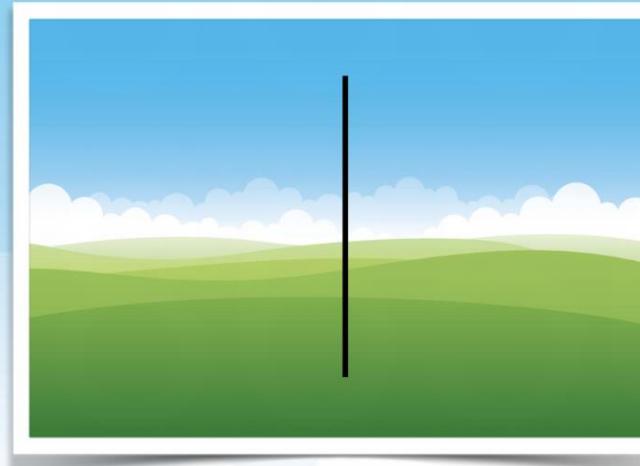
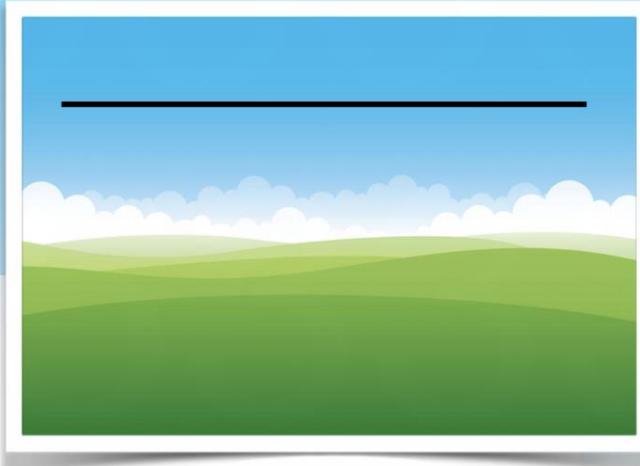
5. Pull the strip of card (the handle) to the right to move the snail.



TOP TIP! For a handle at the front, cut another slot underneath the first one, and pull the strip of card through this too.



The slot can be cut anywhere on your background scene.

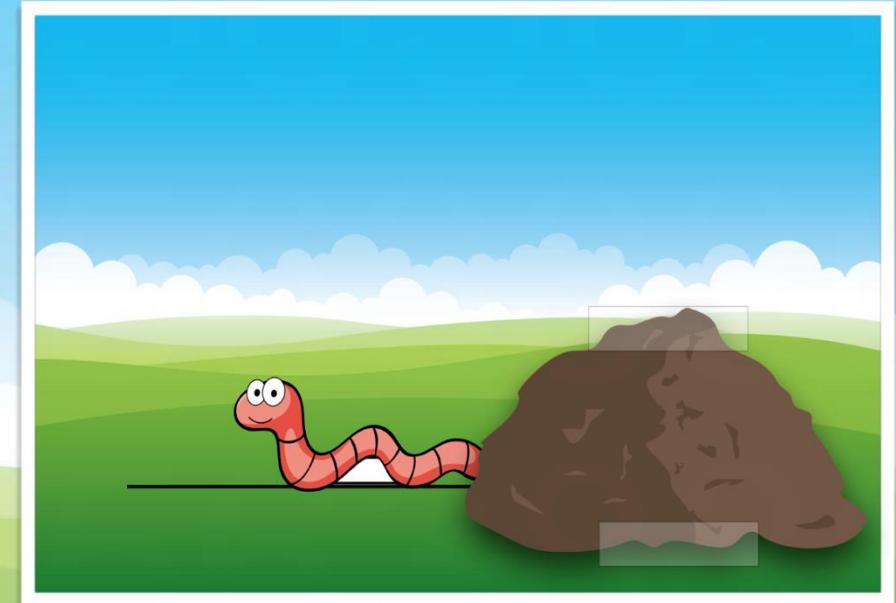
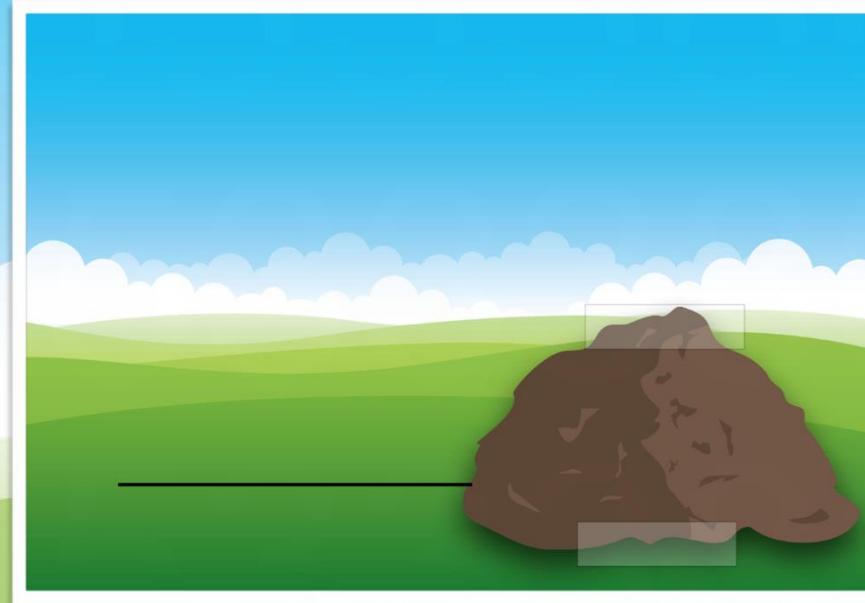
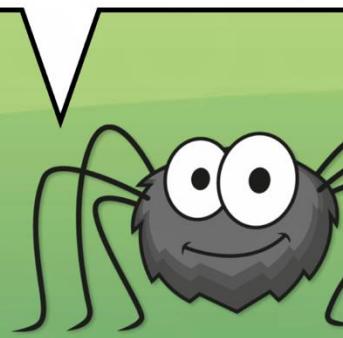


What other moving pictures could we create with these minibeasts?
Think, pair, then share your ideas.

You can also use a sliding mechanism to make pictures appear and disappear...

Did you guess correctly?!

What minibeast
you think is hid
behind this pile of



With a partner, talk about how you think this moving picture was made.

Storyboard 2

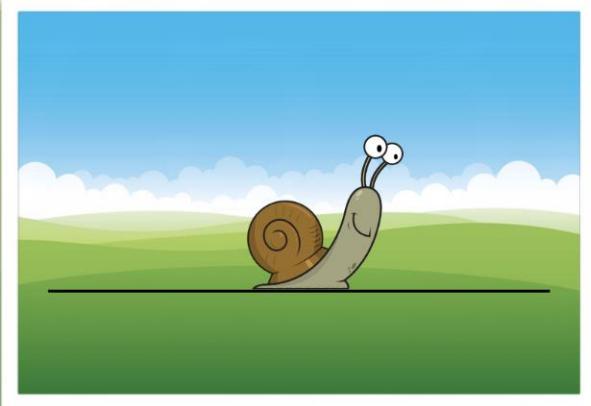
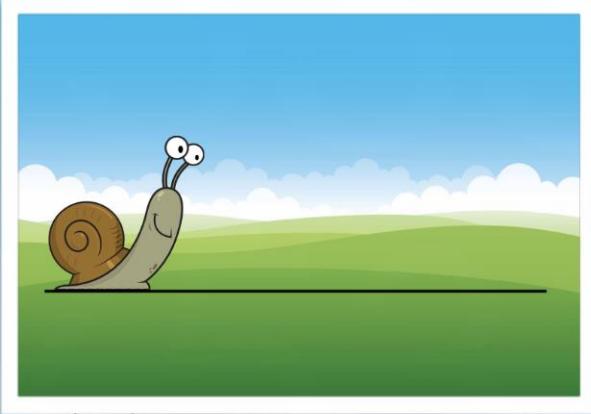
故事书 2

Lever and Pivot Mechanism

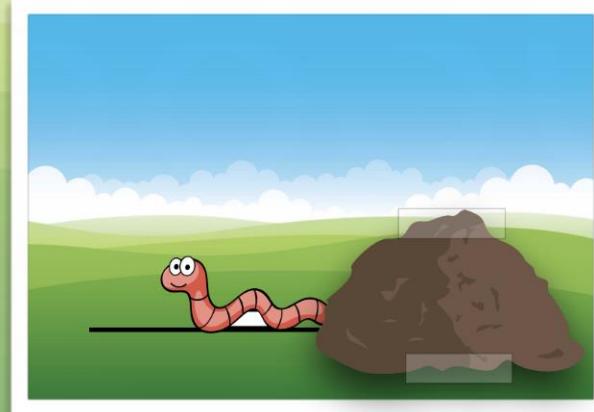
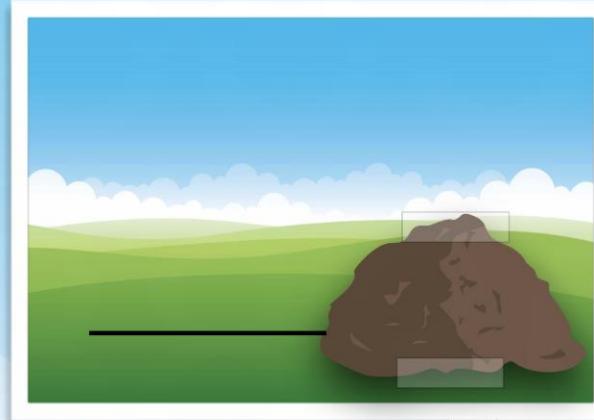
杠杆和枢轴机构

Gànggǎn hé shū zhóu jīgòu





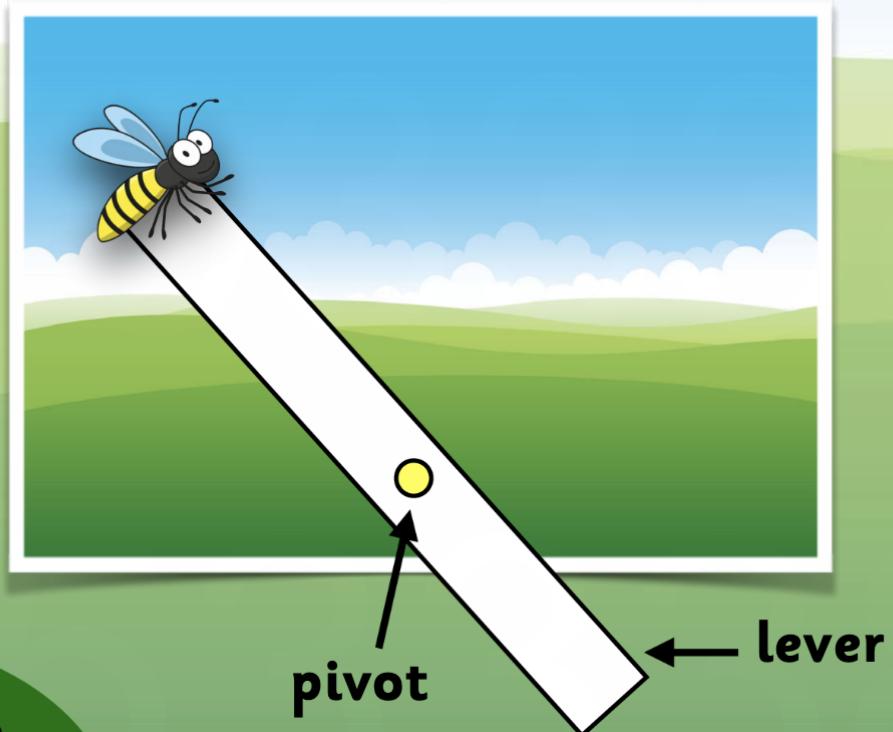
Can you remember
the name of the
mechanism which
makes these
minibeasts move?



Sliding Mechanism

滑动机制. Huádòng jīgòu

Today we are going to look at a different type of mechanism we can use to make a moving picture.



How do you
think this moving
picture works?



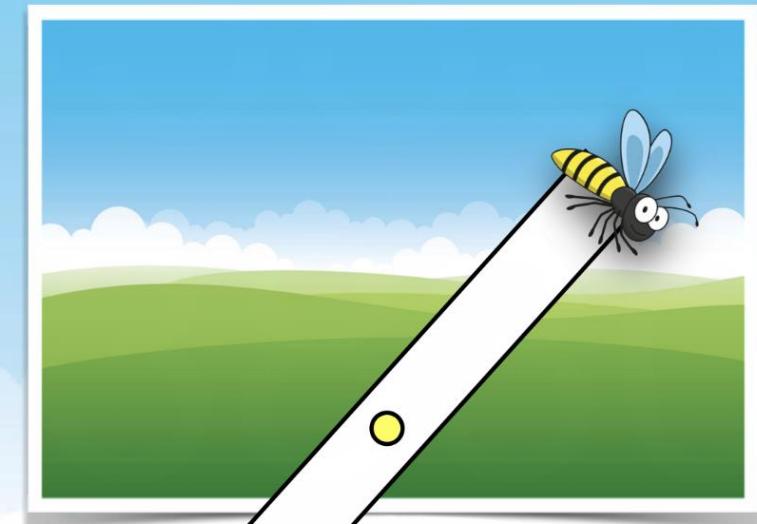
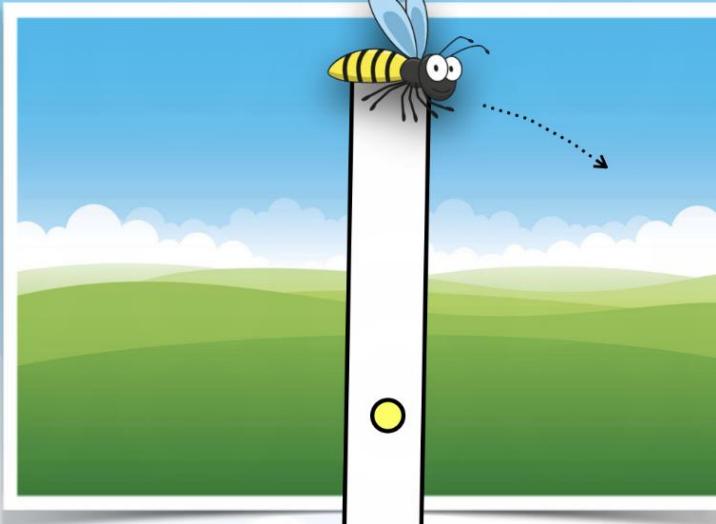
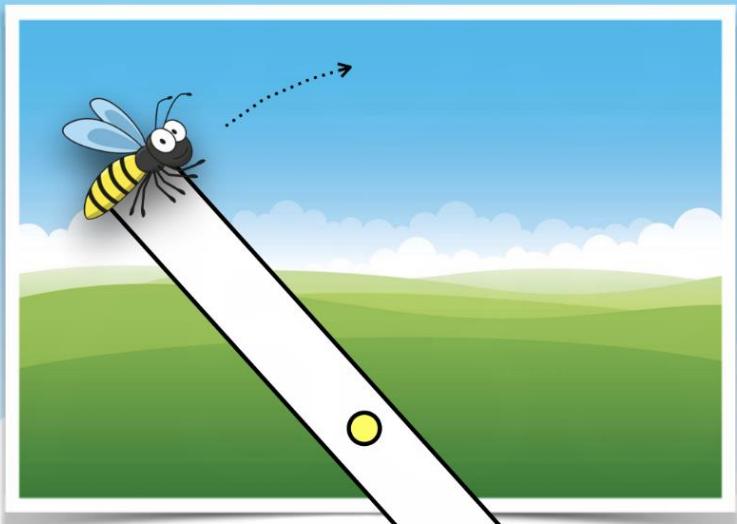
枢

Shū

杠杆

Gàng gǎn

The **pivot** allows the **lever** to move from side to side in an **arc**.



What do you think the **pivot** is?
How does it allow the **lever** to move?

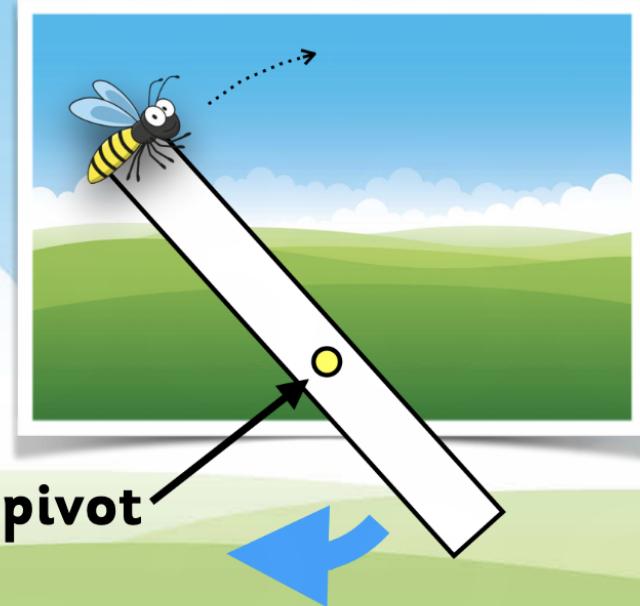


Arc

弧

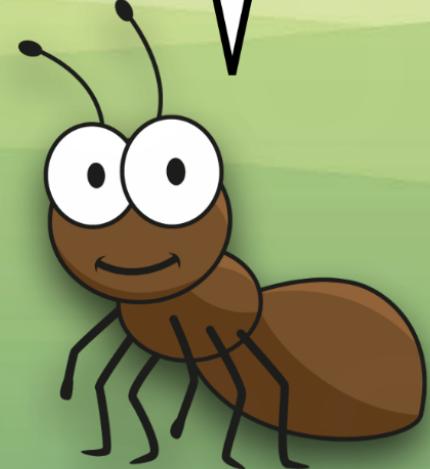
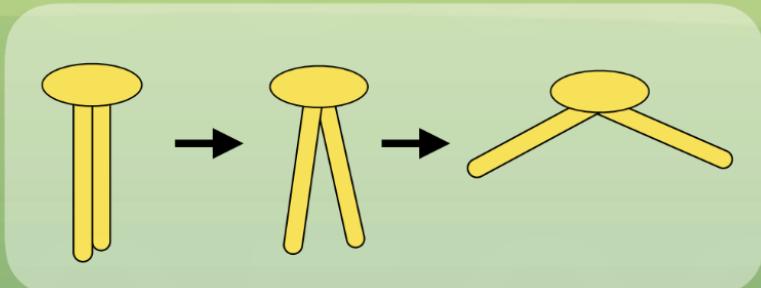
Hú

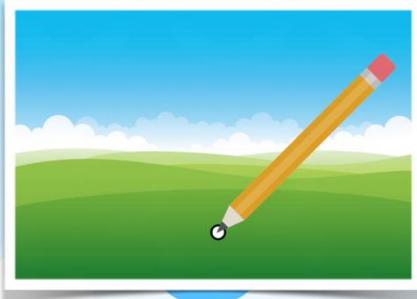
The **pivot** is a **fixed point**. This means it does not move, but it allows the **lever** that is attached to it to move.



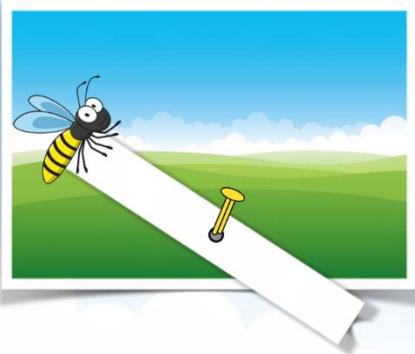
Paper fasteners are also called **split pins** - they have two pins that can flatten out so they can hold two or more pieces of paper or card together.

The **pivot** is made by making a hole in the lever and the background scene, and inserting a paper fastener to join them together.

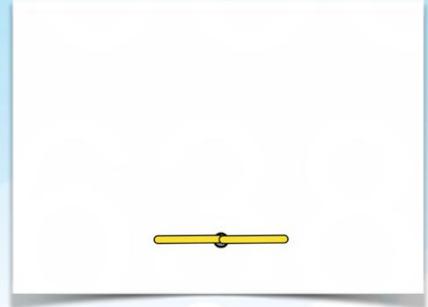




Make the hole in the background scene in the same way.



From the front, push the paper fastener through both holes.



Turn the background scene over, and push the two pins of the paper fastener apart and down so that they are flat on the card.

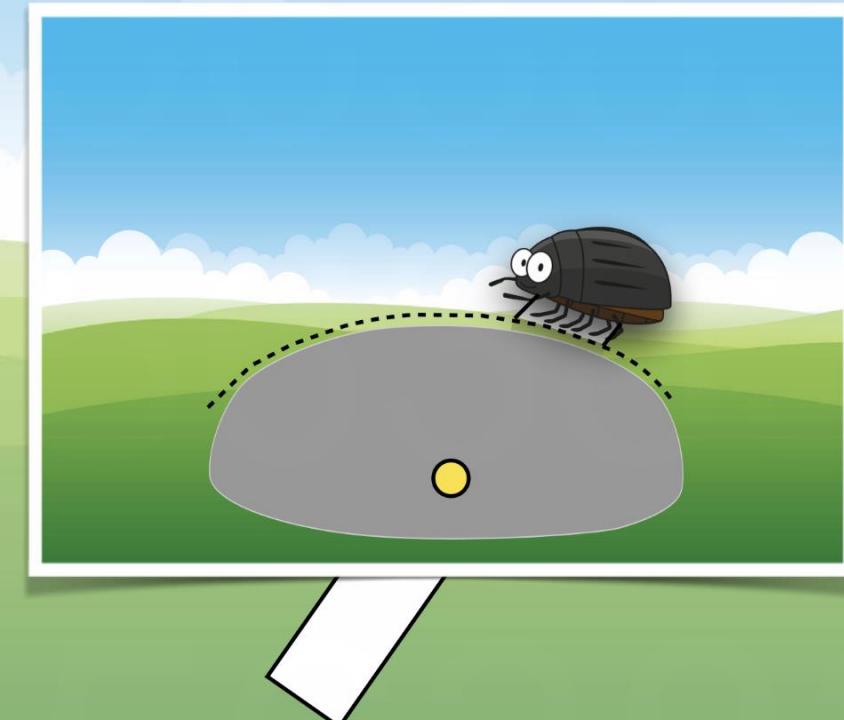
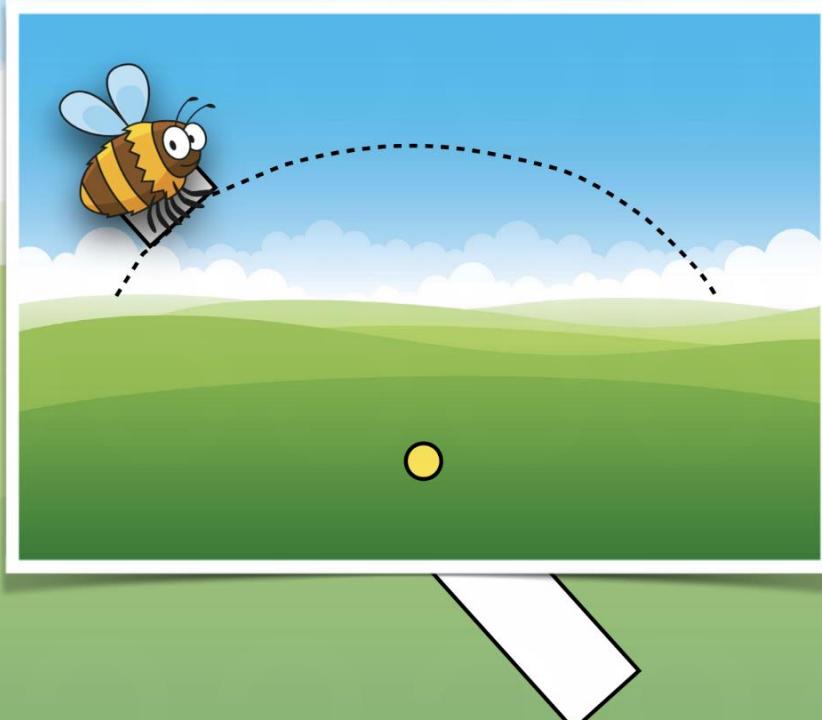
Arc

弧

Hú

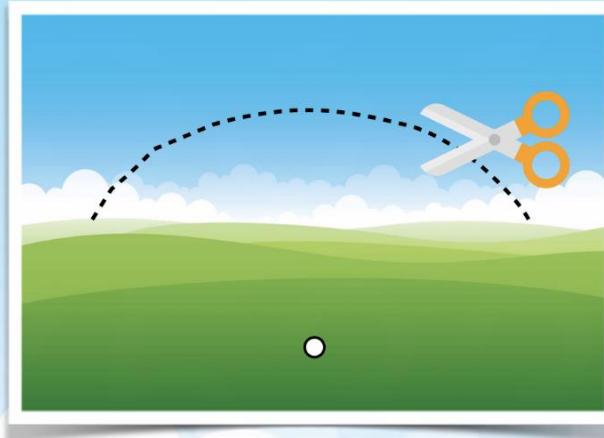
In these two moving pictures, the levers have been hidden at the back of the picture.

Can you explain how this has been done?

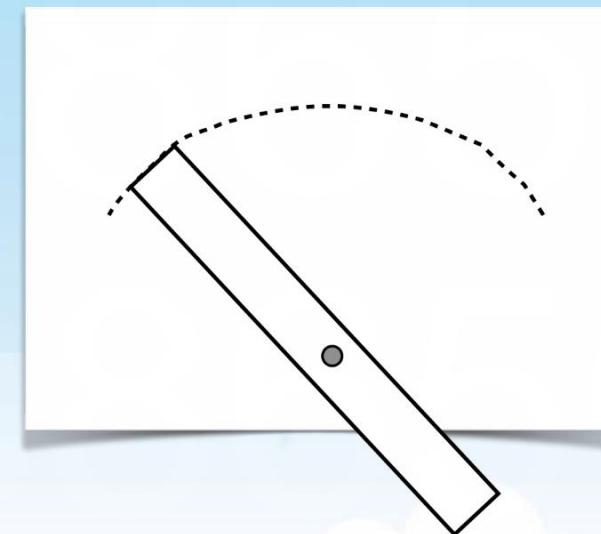


Back

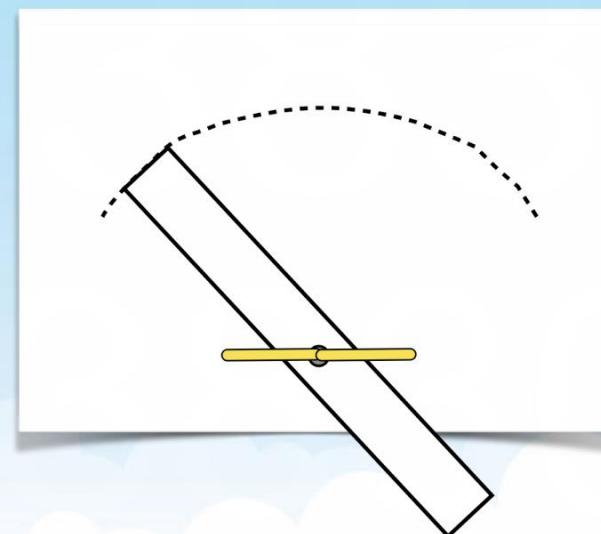
Next



A slot in the shape of an arc is cut along the path that the minibeast will move.

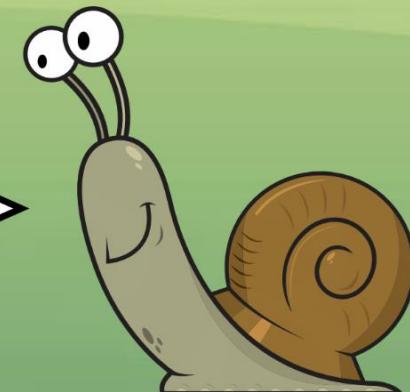


The minibeast on the lever is then pushed through the back of the slot so that it appears on the front of the picture.



The lever and background scene are attached together with a paper fastener at the back of the picture.

Do you think the moving pictures look better when the lever is hidden? Why?



Back

Next

Storybook 3

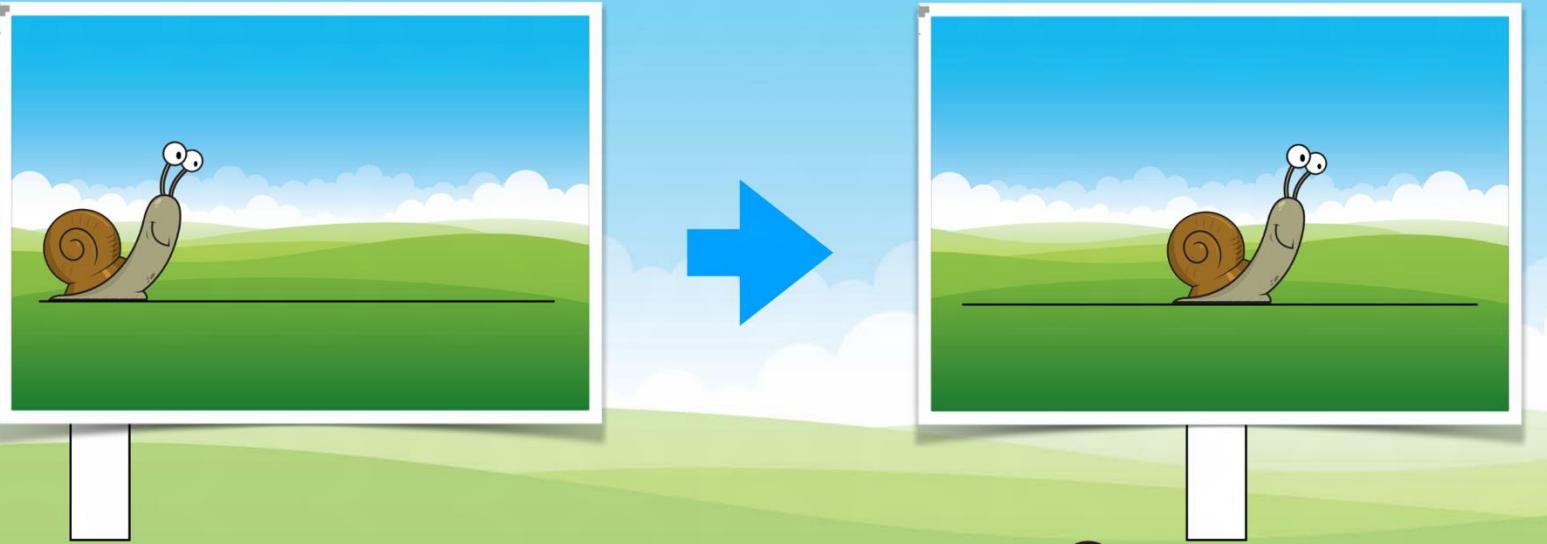
故事书 3

Wheel Mechanism

轮子 机构

Lúnzi jīgòu



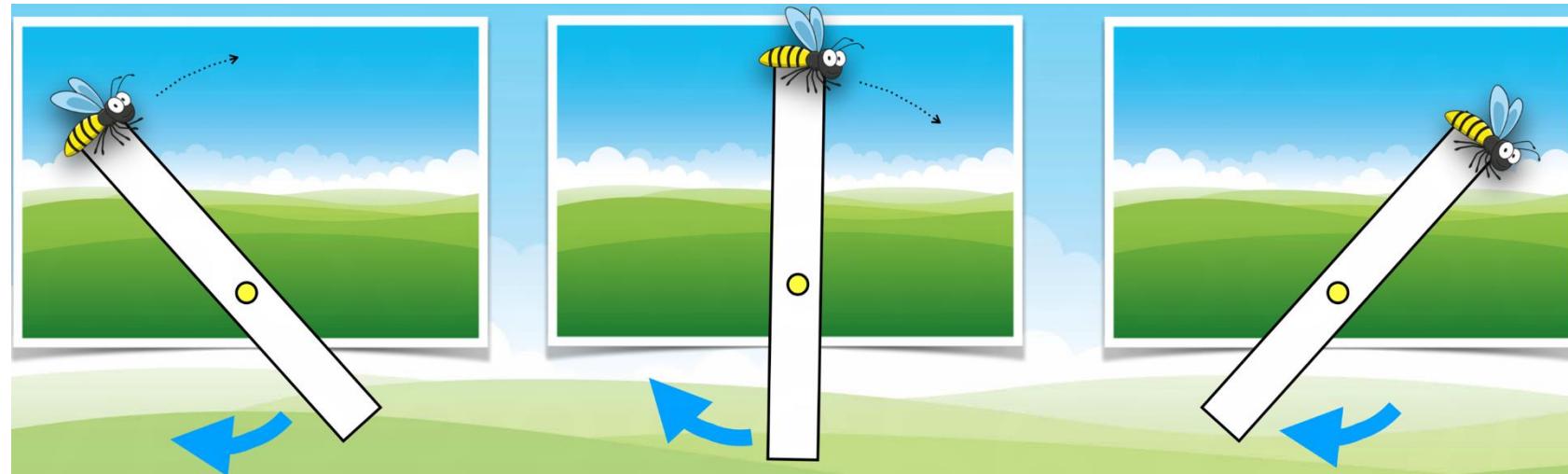


Sliding Mechanism

滑动机制

Huádòng jīgòu

Lever and Pivot
Mechanism



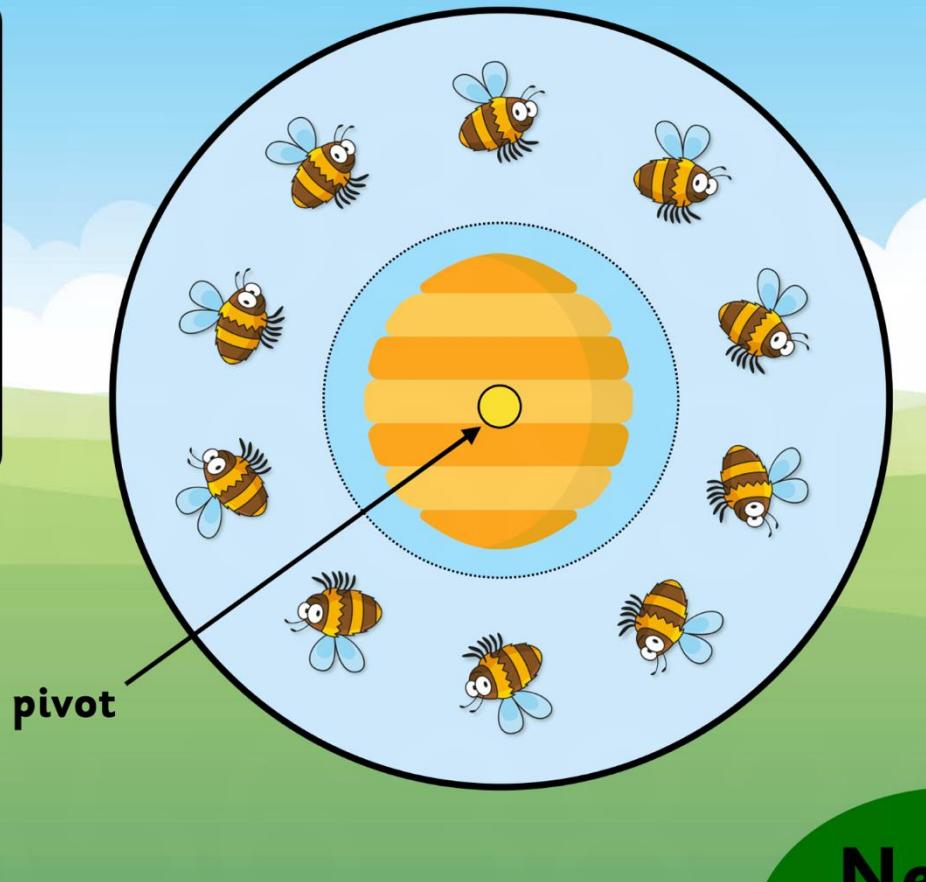
杠杆和枢轴机构

Gànggǎn hé shū zhóu jīgòu

Today we are going to look at a third type of **mechanism**.

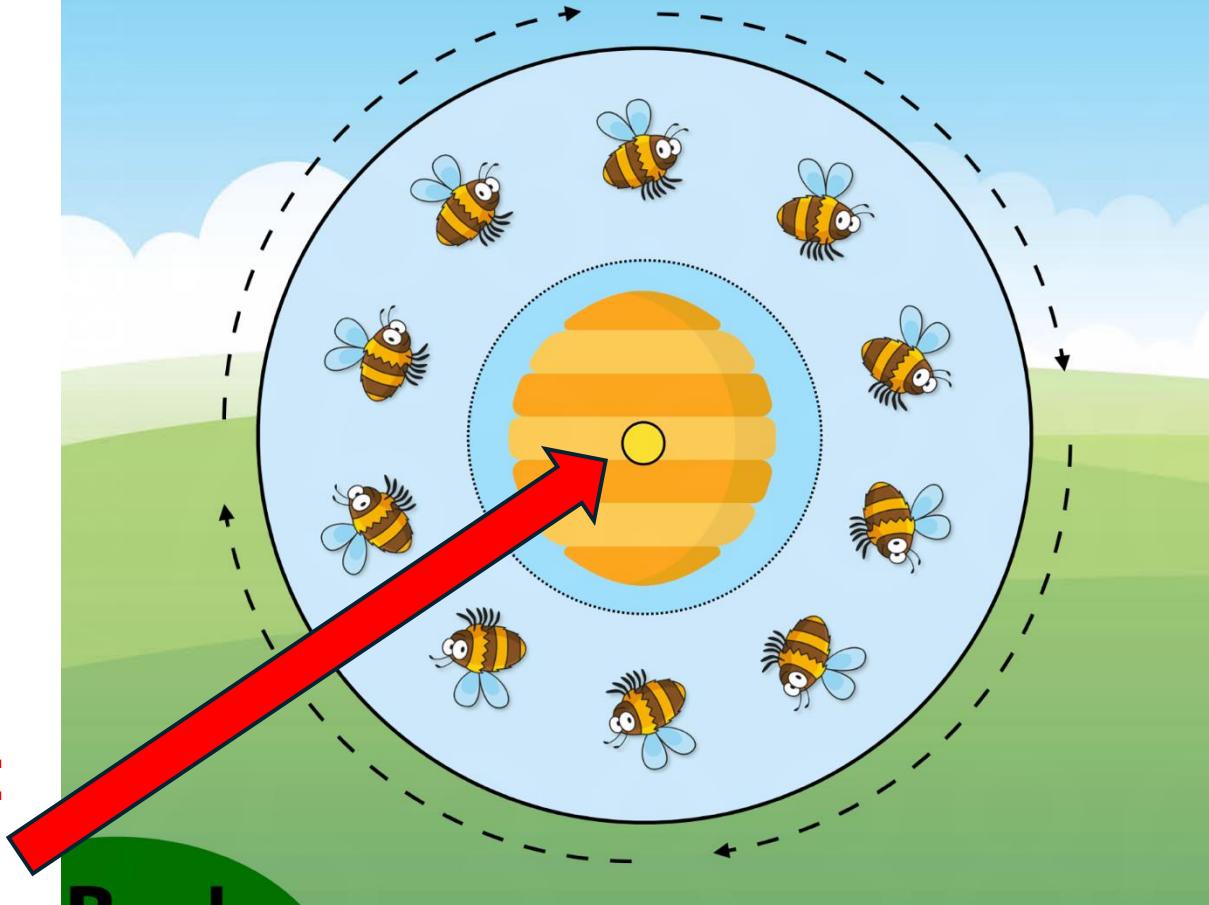
This is called a
wheel mechanism.

Which part do you think
moves? How?



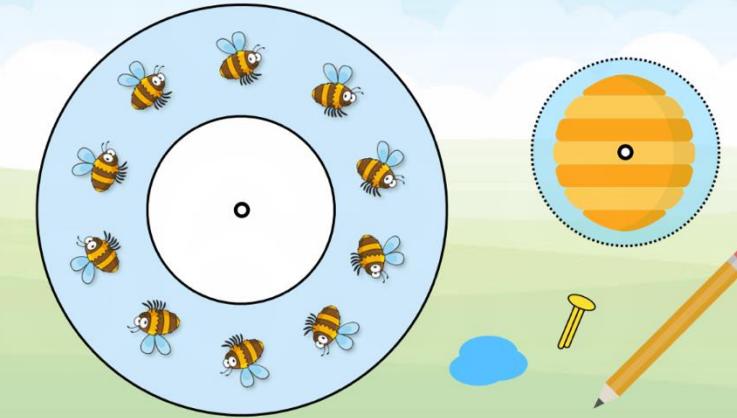
Wheel Mechanism
轮子机构
Lúnzi jīgòu

The **pivot** allows the outside, larger wheel to move around the inside, smaller wheel. This makes it look like the bees are flying around the hive!

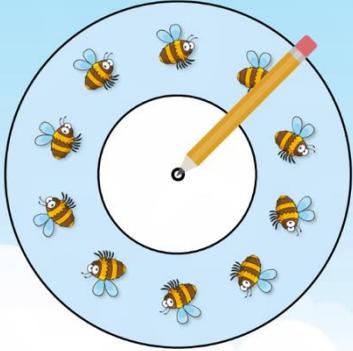


Pivot
枢
Shū

Here is the equipment needed to make this moving picture:



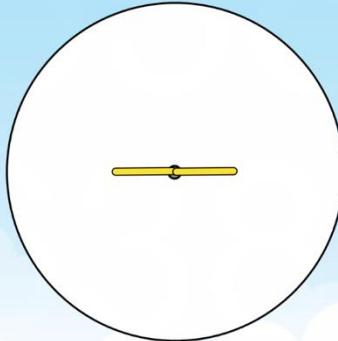
With a partner, can you explain how to make it?



First, a hole needs to be made through the centre of each of the wheels.



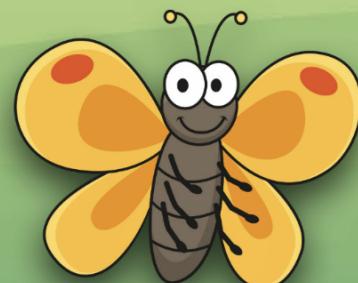
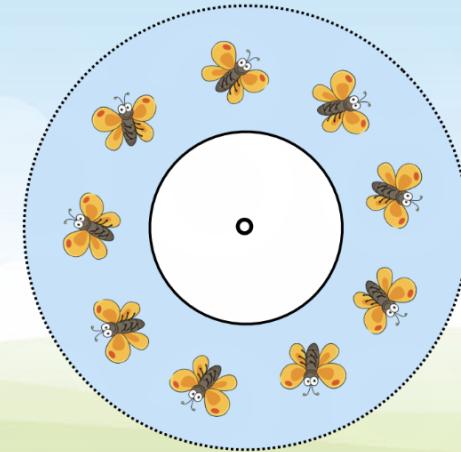
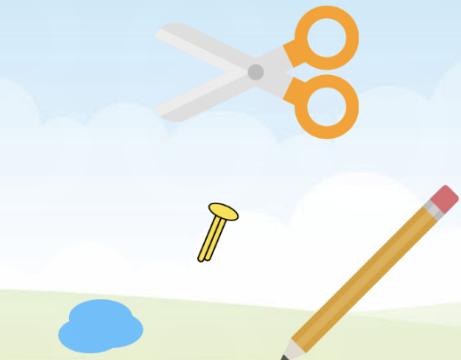
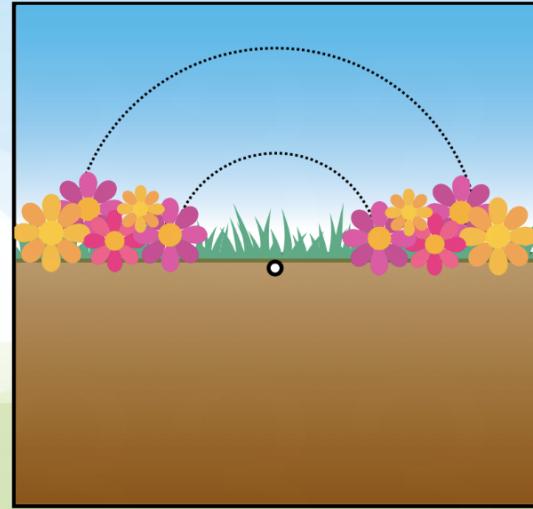
Push a paper fastener through the front of both of the wheels.



Turn over the wheels and flatten out the pins of the paper fastener.

Mr. Yaro, can you give me a pin, please?

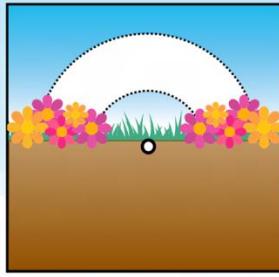
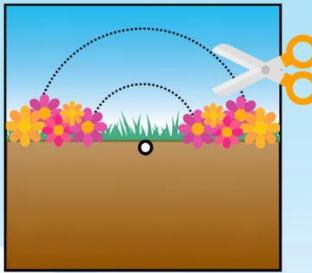
Here is the equipment needed to make a different moving picture with a **wheel mechanism**:



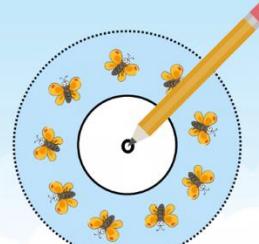
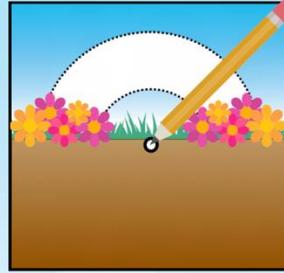
Look carefully at the equipment above.
How can it be used to make a moving picture
of butterflies flying through the sky?

Back

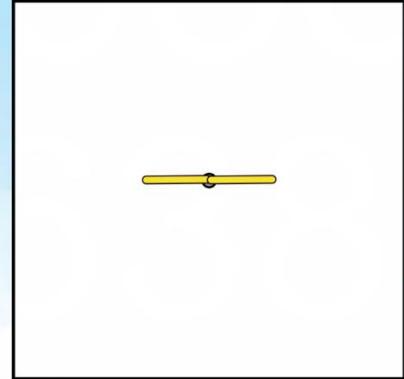
Next



First, use a pair of scissors to carefully cut out the window marked by the dotted lines.



Next, make holes in the centre of the picture and the wheel, using a lump of sticky tack and a sharp pencil.

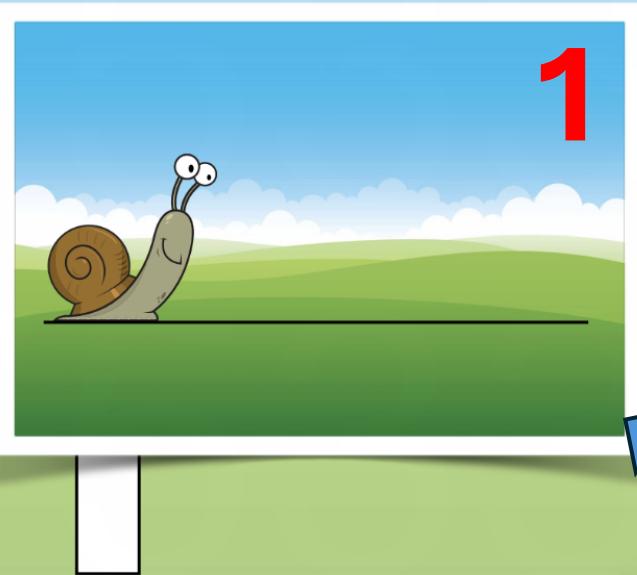


Turn the picture over and flatten out the pins of the paper fastener.

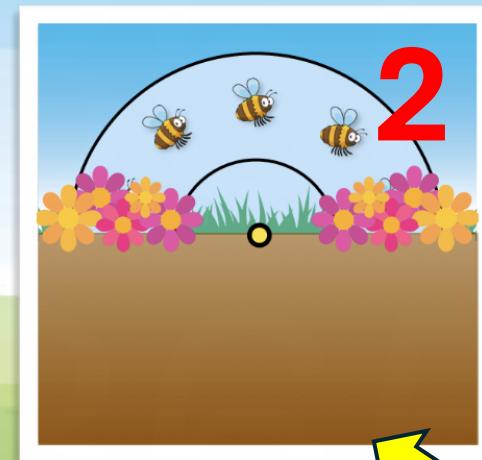
Storytelling

故事

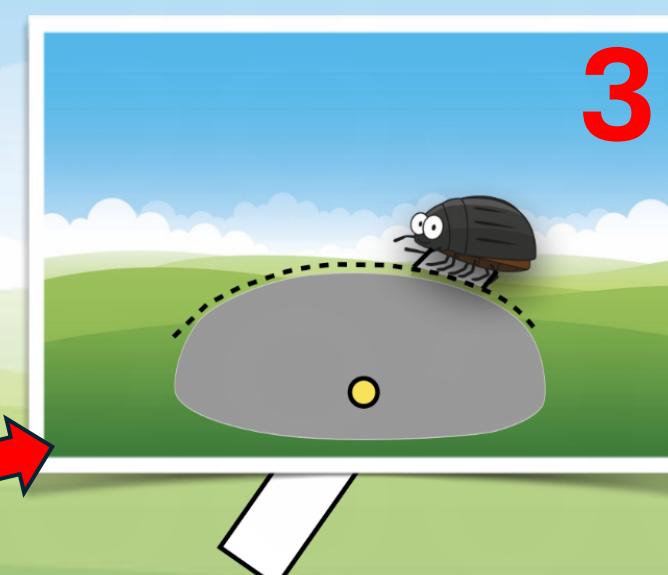
Can you match up the moving pictures to the mechanism that has been used to make them?



1



2



3

lever & pivot
1 mechanism

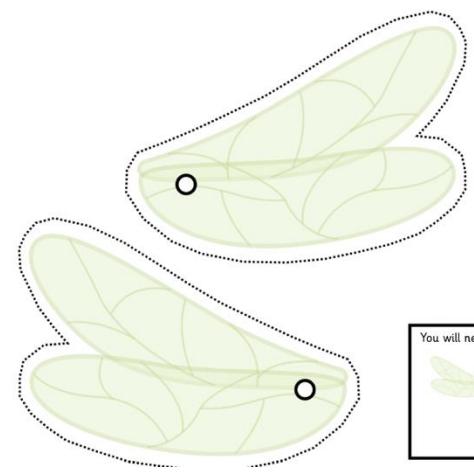
sliding
2 mechanism

3 wheel
mechanism

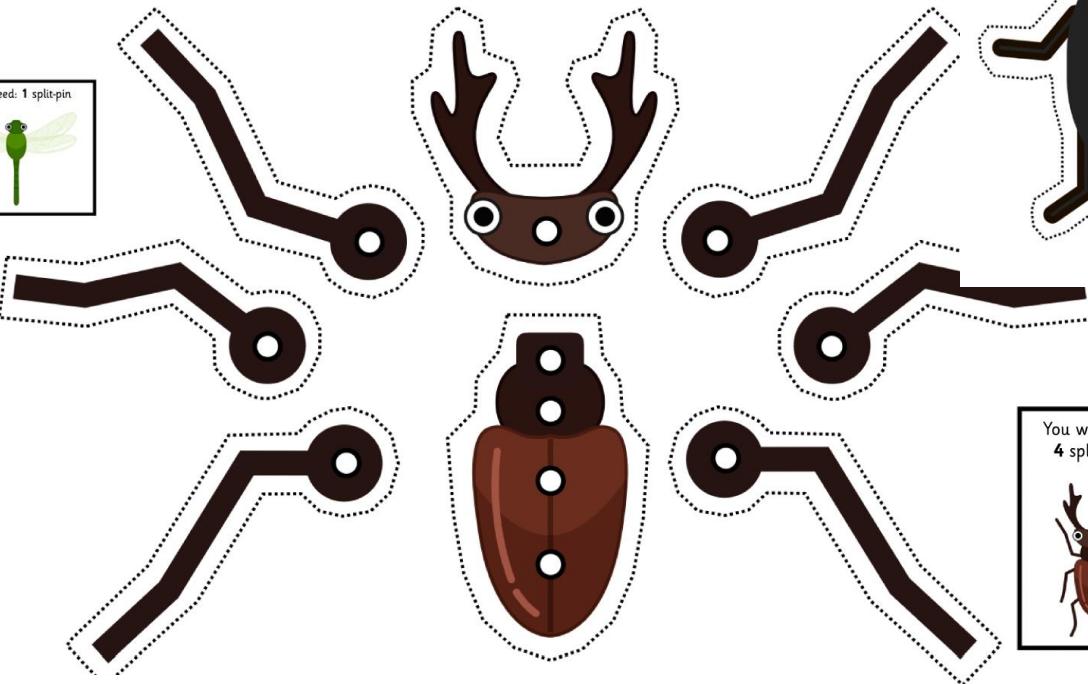
杠杆和枢轴机构
Gànggǎn hé shū zhóu jīgòu

滑动机制
Huádòng jīgòu

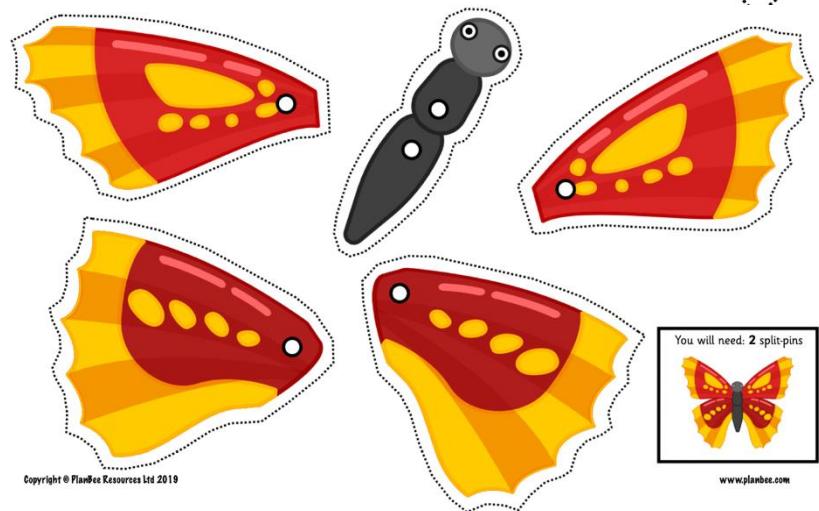
轮子机构
Lúnzi jīgòu



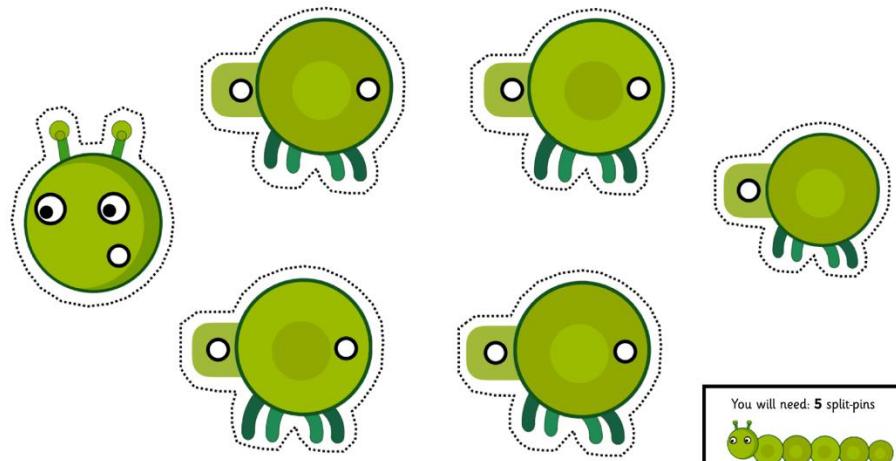
You will need: 1 split-pin



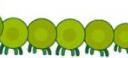
You will need:
4 split-pins



You will need: 2 split-pins



You will need: 5 split-pins



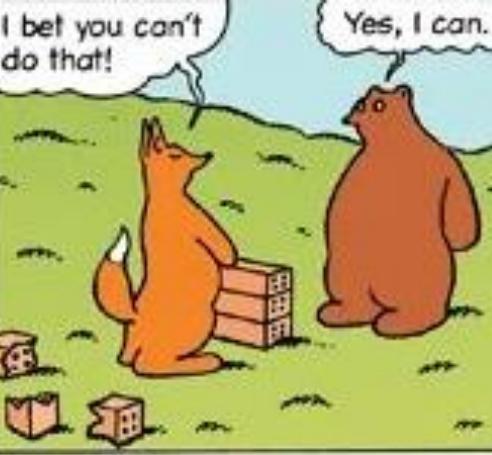
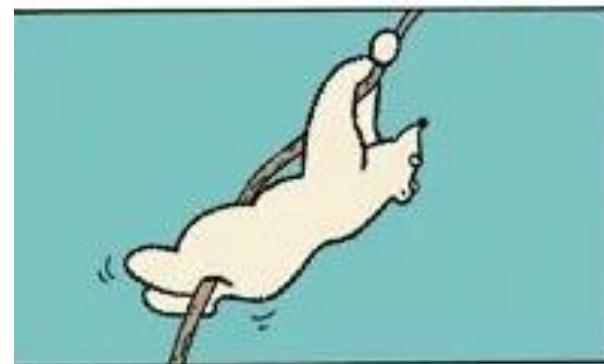
Storyboard 4

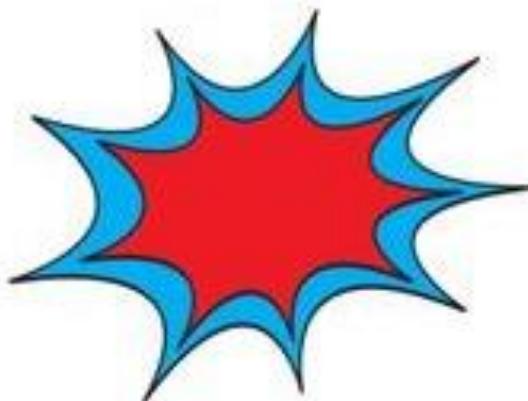
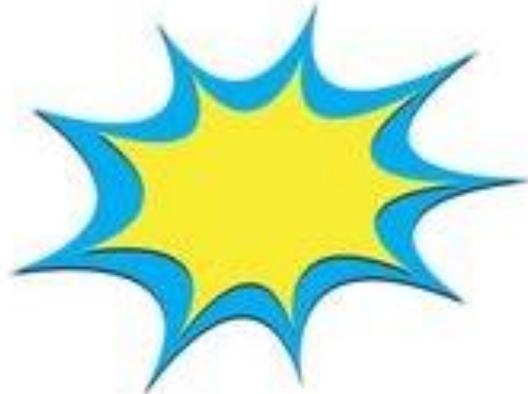
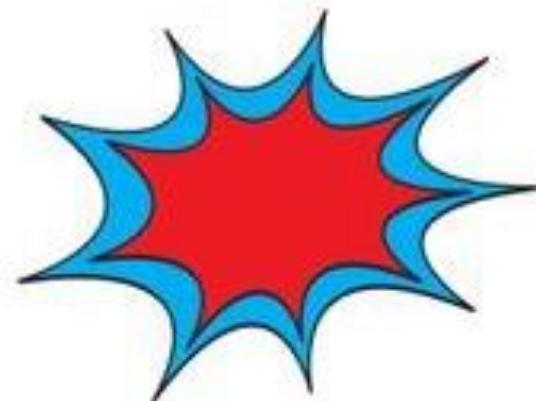
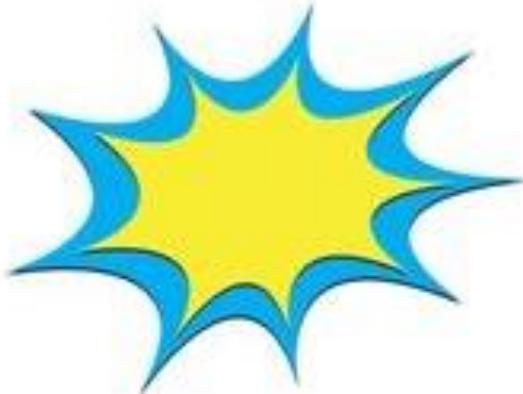
故事书 4

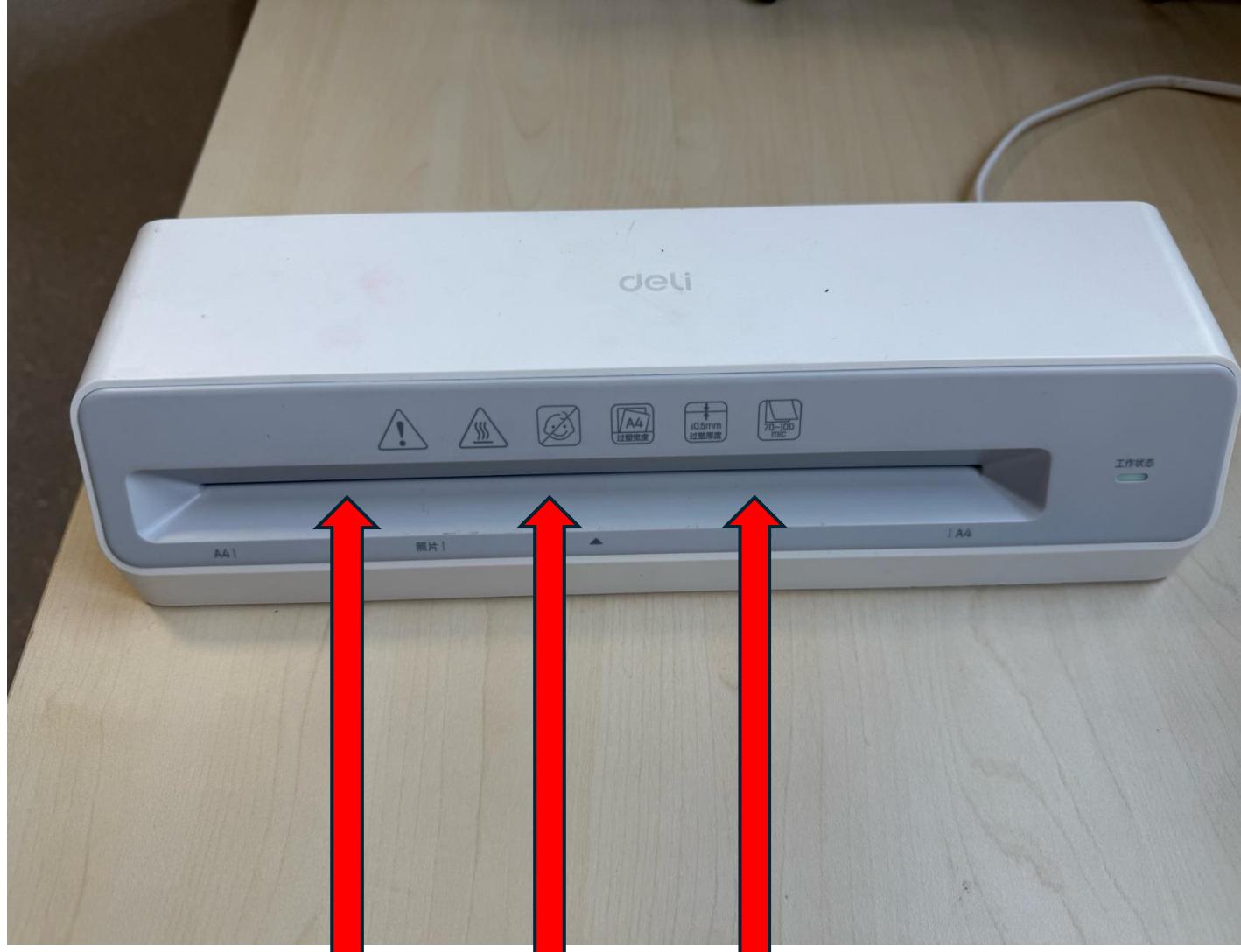
Character and story

人物与故事









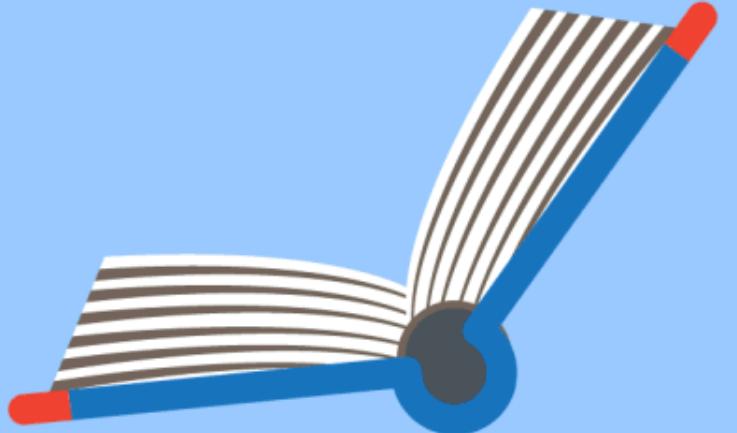
Storyboard 故事书

Pop-up Mechanism

弹出机制

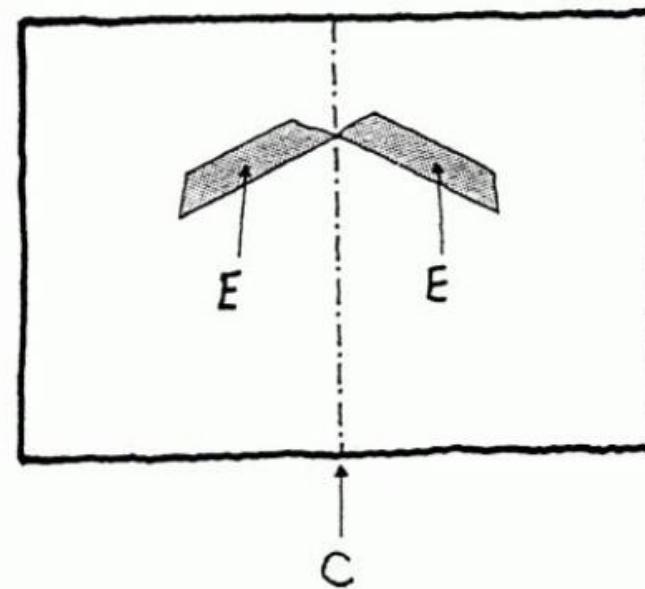
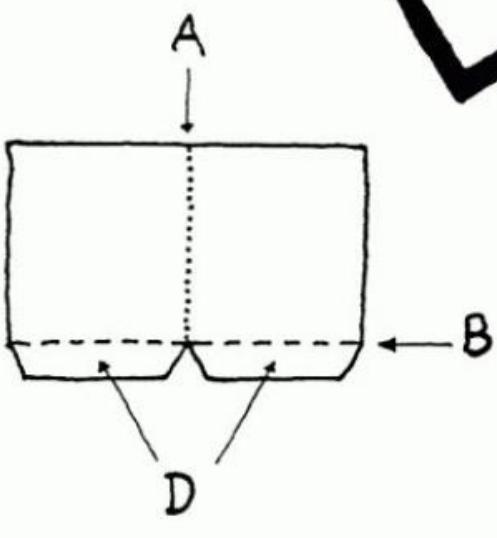
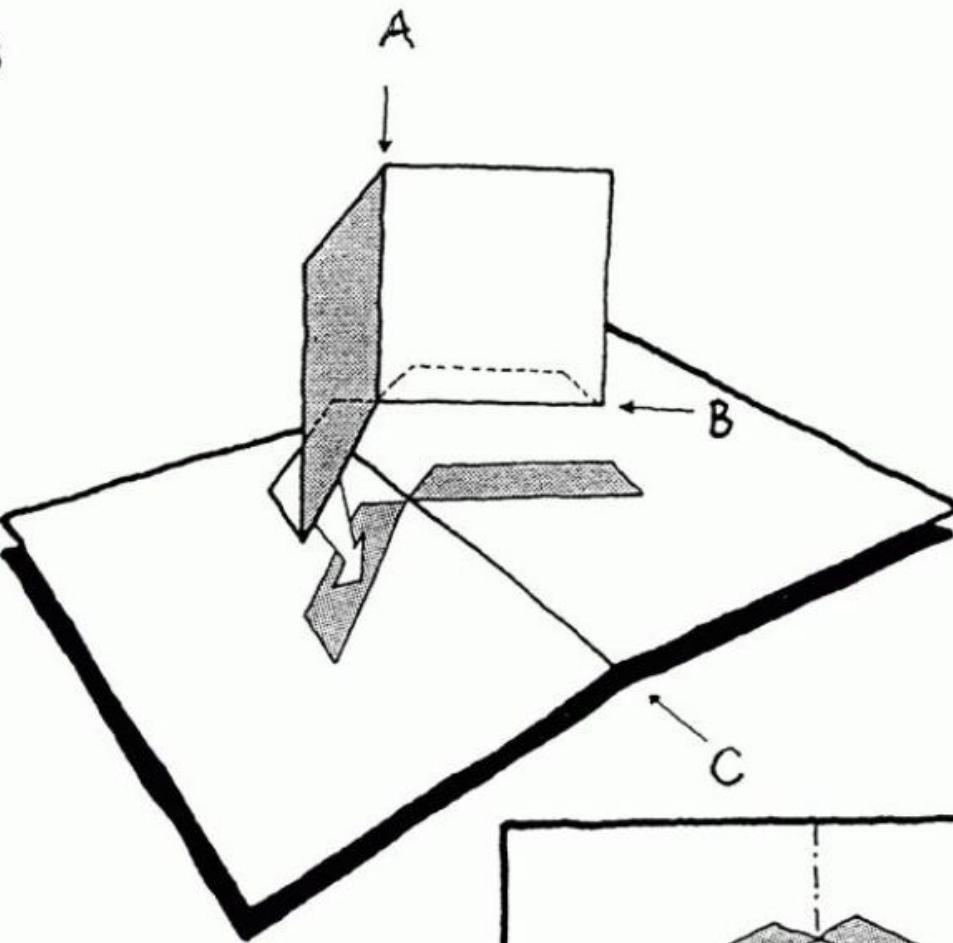
Dànchū jīzhì

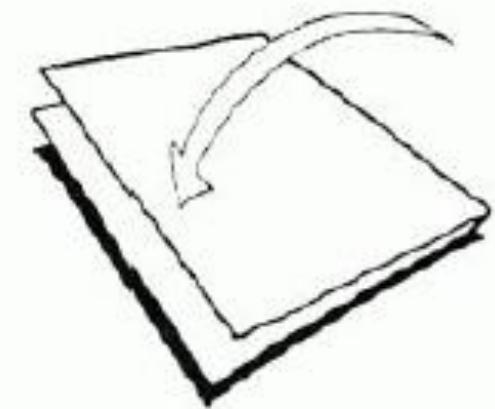
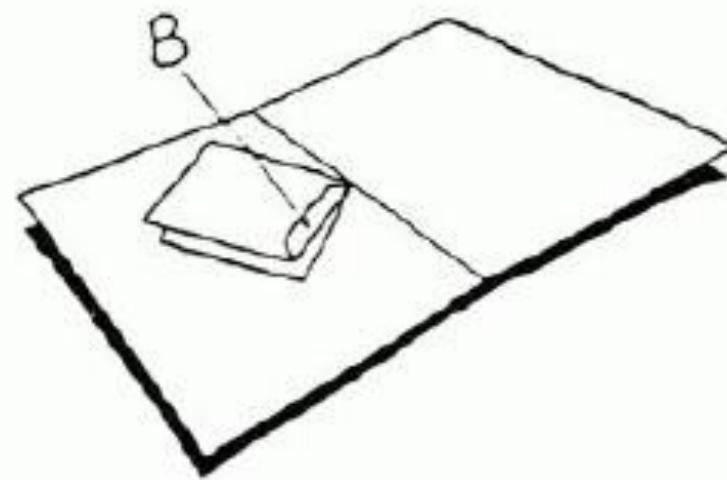
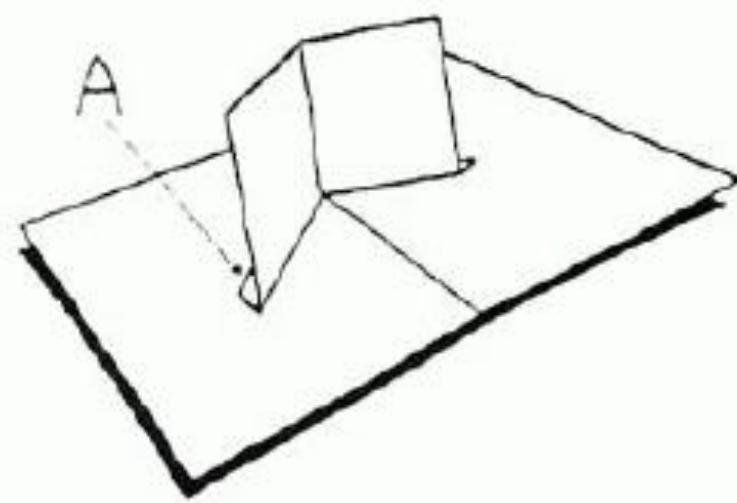




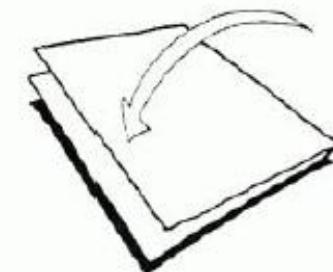
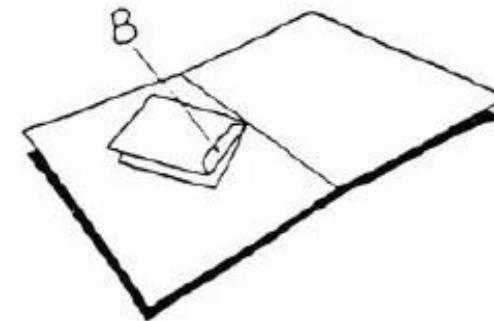
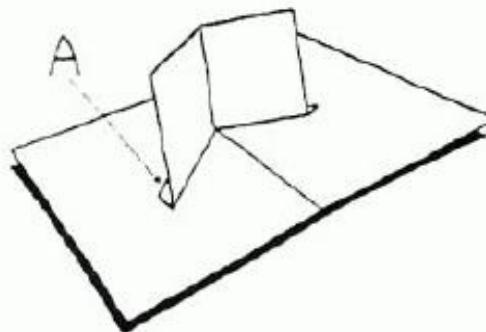
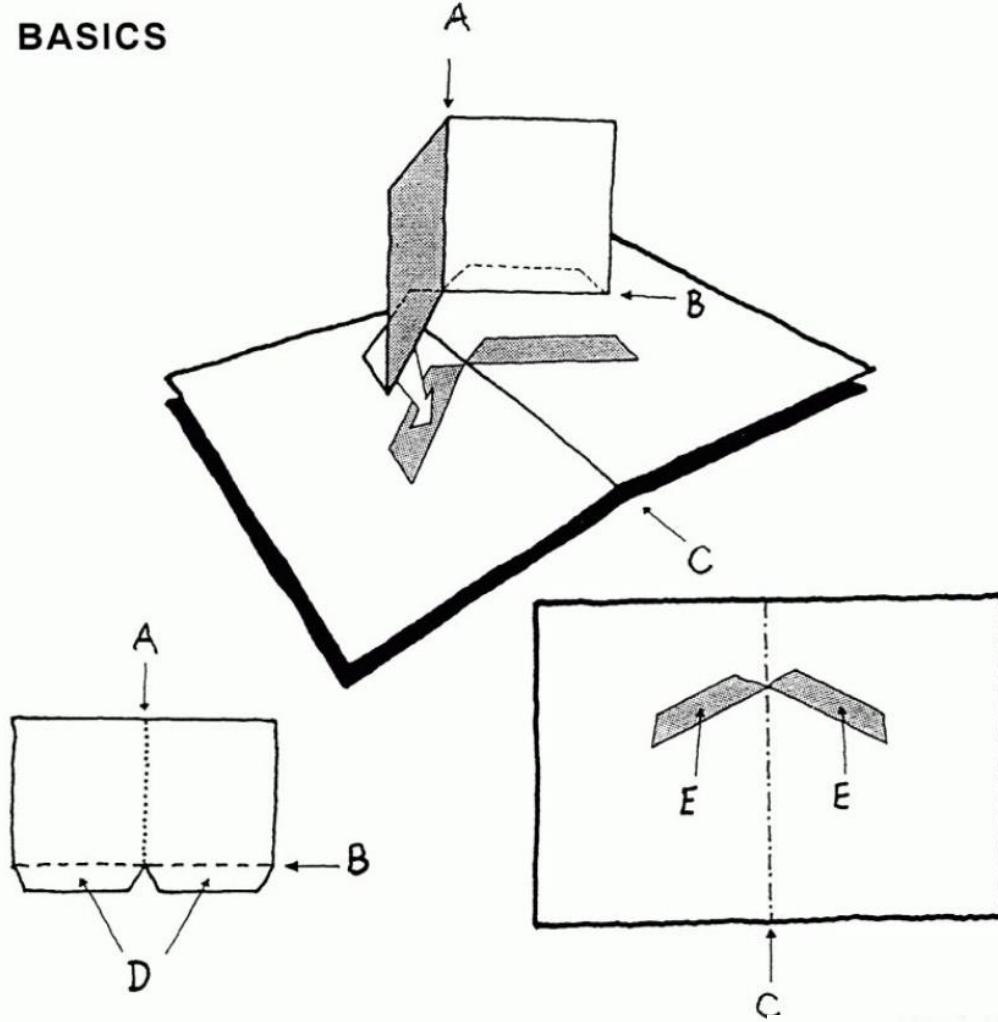
- Pop-up Mechanism
- 弹出机制
- Dànchū jīzhì

BASICS

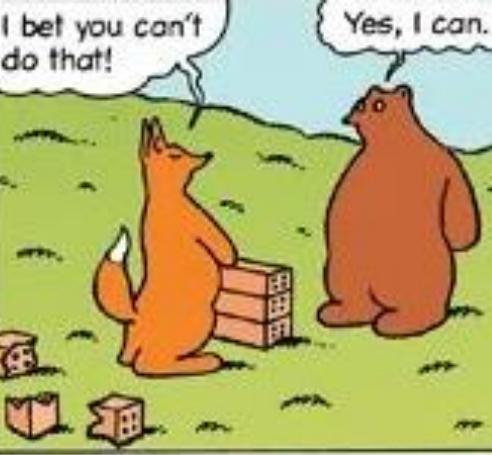
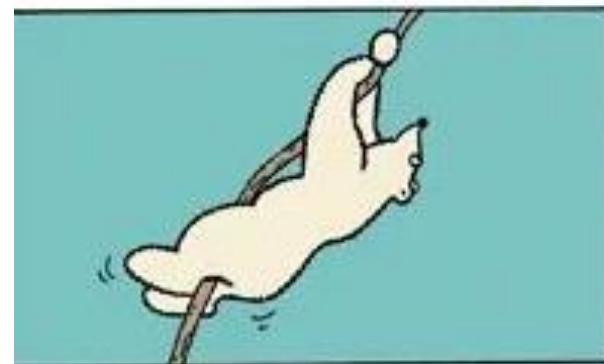


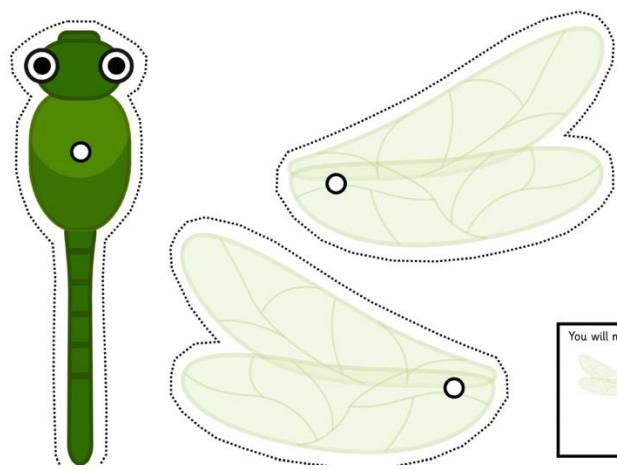


BASICS

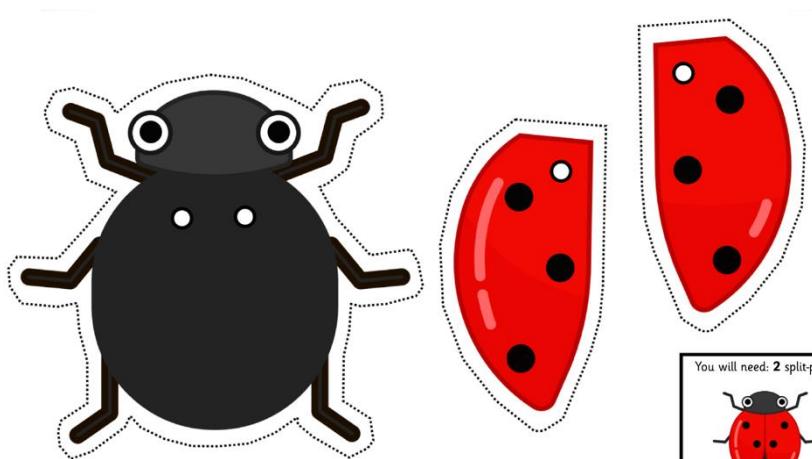




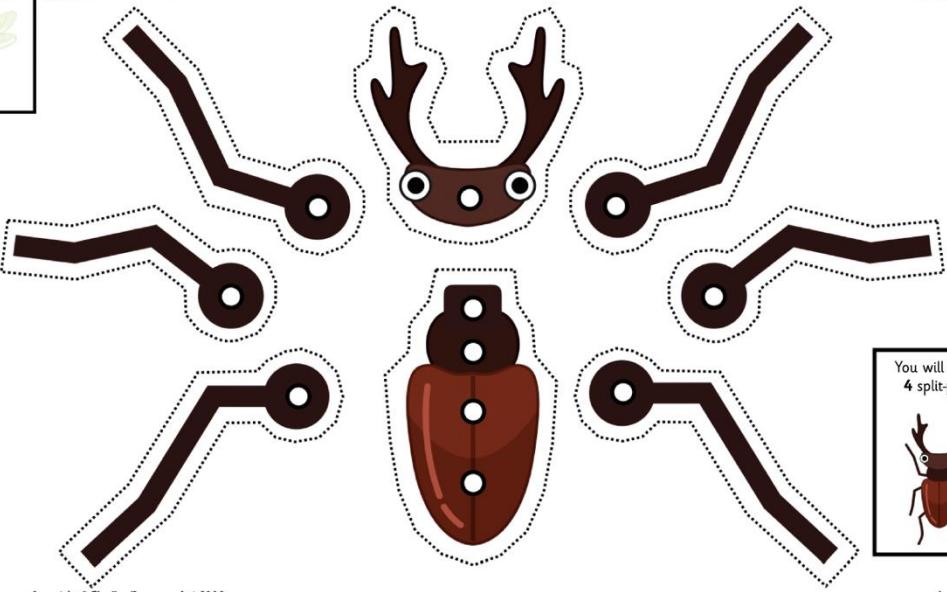




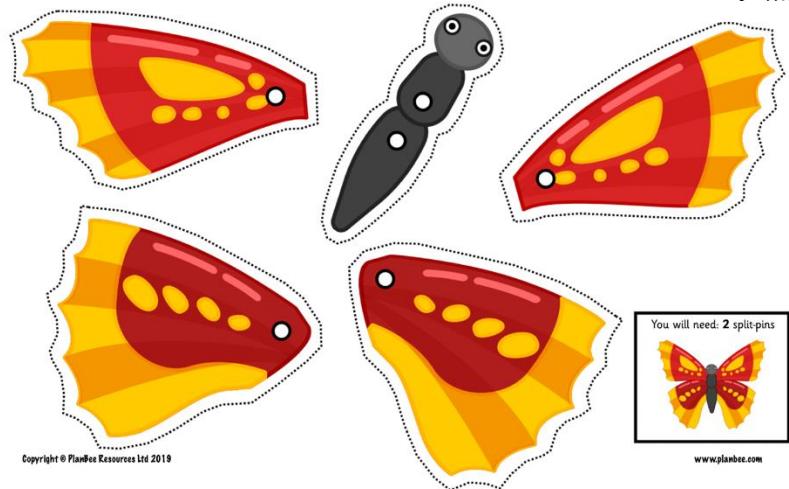
You will need: 1 split-pin



You will need: 2 split-pins

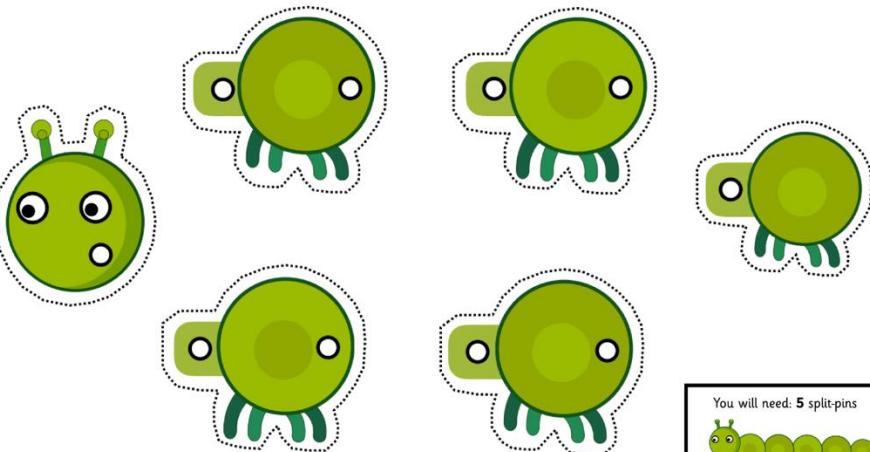


You will need:
4 split-pins

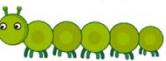


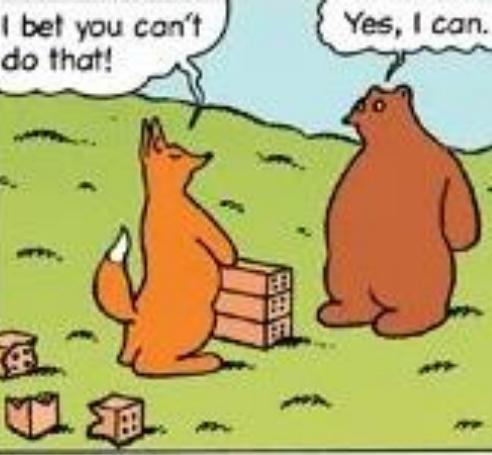
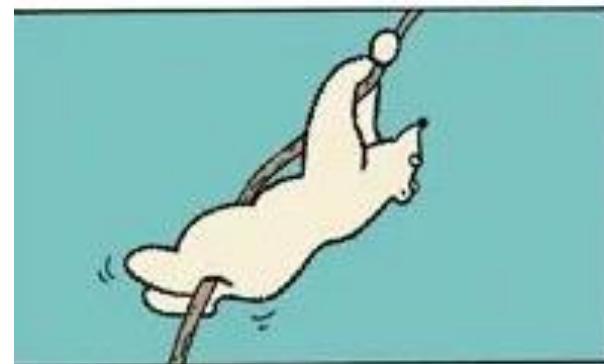
You will need: 2 split-pins

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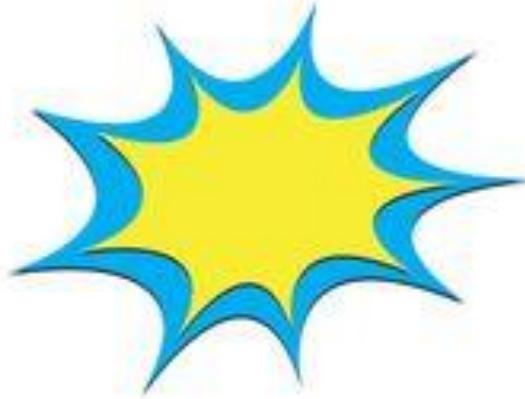
You will need: 5 split-pins





BAM!

ZAP!



BANG

BOOM



WHAM!

KAPOW!

