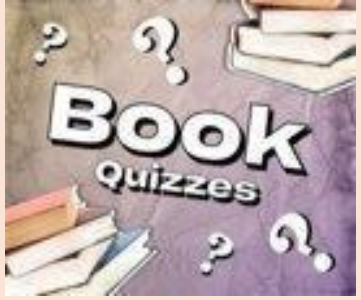
Tuesday 3rd November 2026

03.11.26

Morning Challenge



Welcome back!

We hope you had a fabulous Half Term.

Please complete the sheet and stick in your Morning Challenge Book.



03.11.26

Times tables/Just know its

7 Times Tables

Using multiplication grids



03.11.26

TBAT: find equivalent fractions.

3 in 3

1) Half 468

2) Double 265

3) Find ¼ of 24

Challenge-

Miss Honey is thinking of a number. She halves it, then halves it again, and the answer is 75.

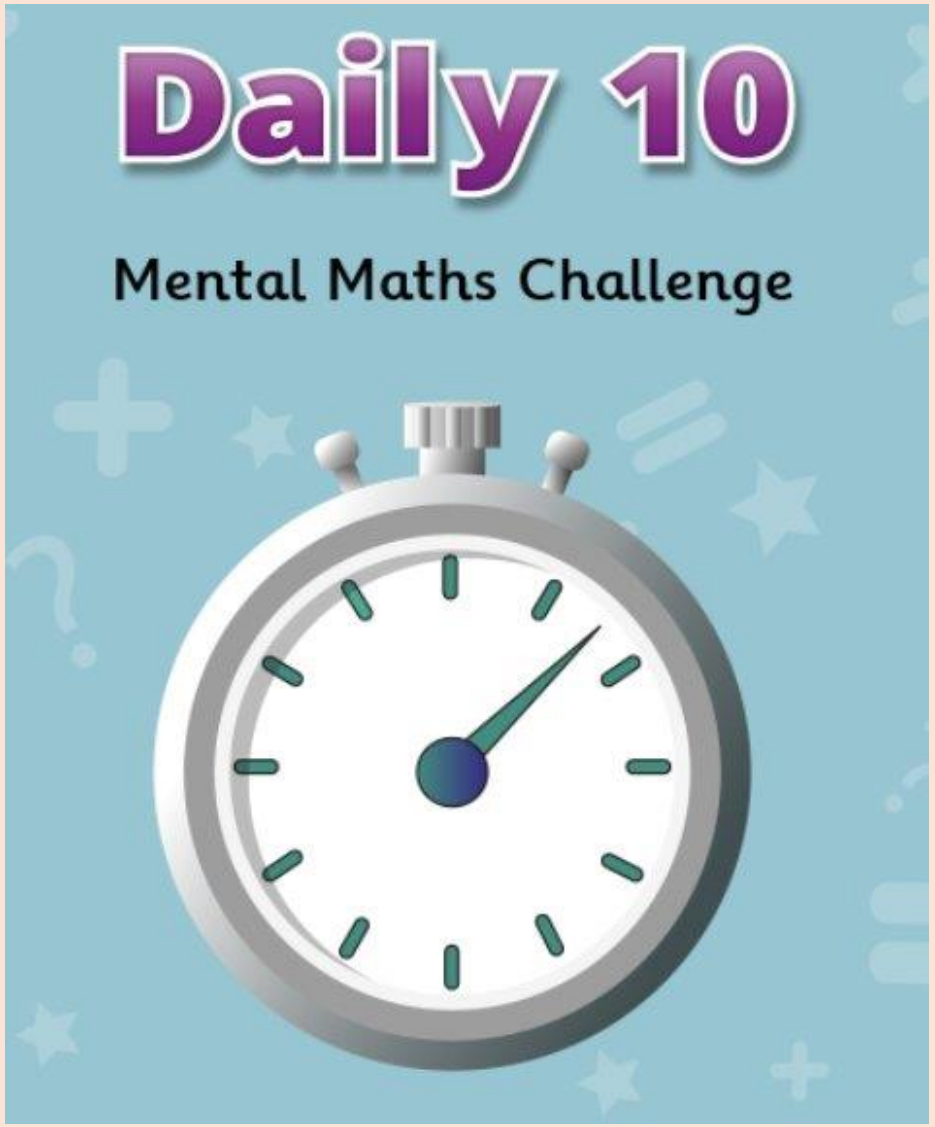
What number did she start with?

03.11.26

TBAT: find equivalent fractions.

Daily 10 - Mental Maths Challenge - Topmarks

Level 4- 7 times tables



Key Vocabulary

Fraction
Numerator
Denominator
Equal parts
Whole

03.11.26

TBAT: find equivalent fractions.

Partner talk:

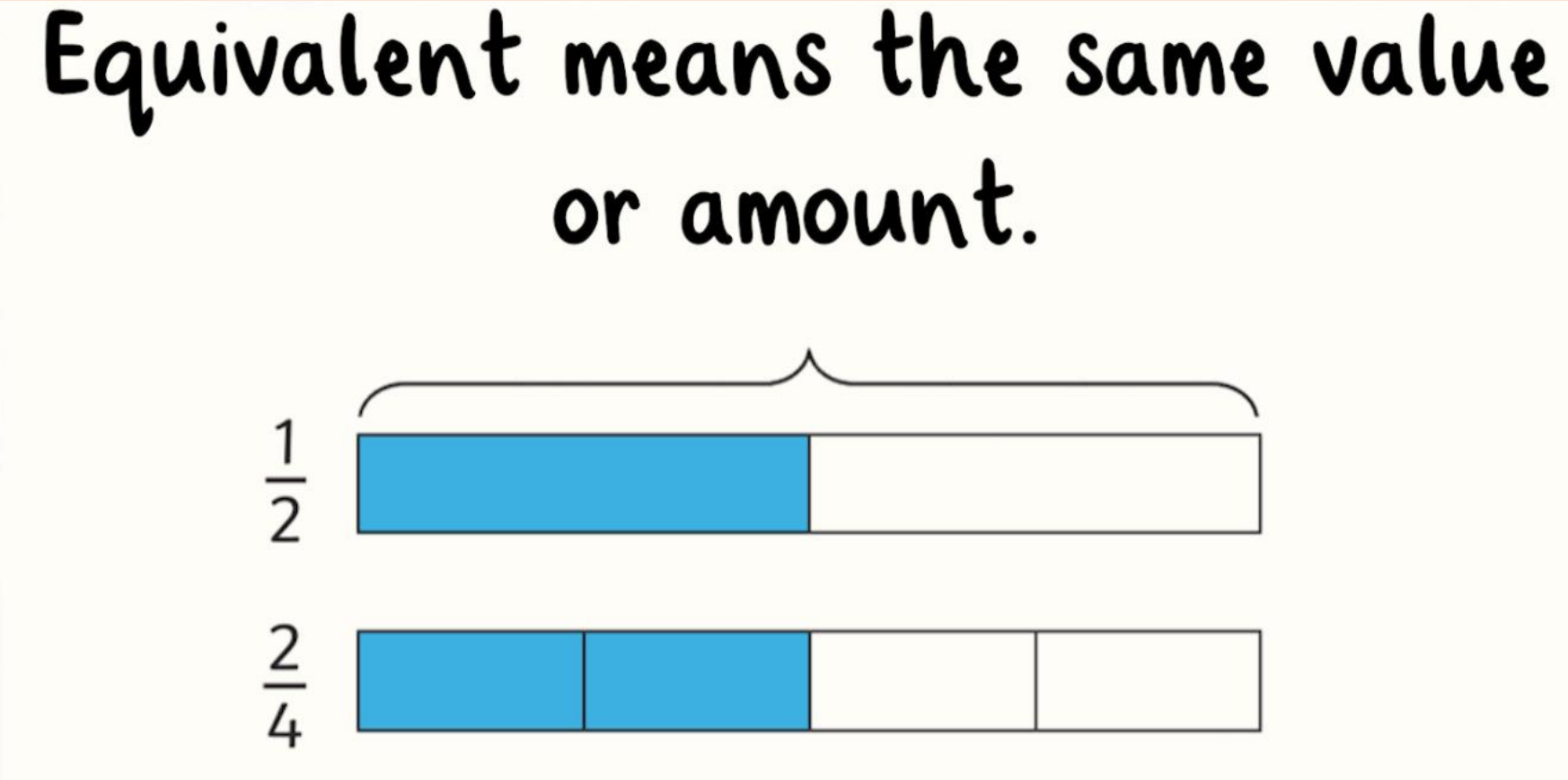
What is the numerator?

What is the denominator?

Challenge: What is the line called between the numerator and the denominator?

Equivalent fractions

An equivalent fraction means two or more fractions that show the same amount, even though they use different numbers.



We do

Equivalent fractions

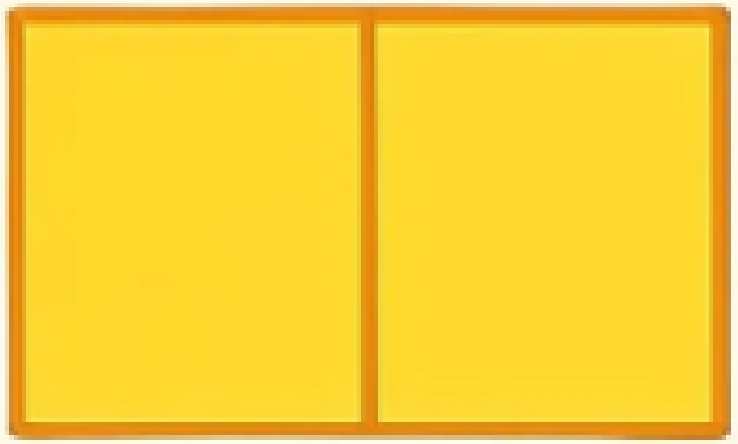
To find an equivalent fraction, multiply or divide the numerator and denominator by the **same number**.

$$\frac{2}{4} \overset{\times 2}{\underset{\times 2}{=}} \frac{\quad}{\quad}$$

Challenge: Why must the numerator and denominator be multiplied/divided by the SAME number?

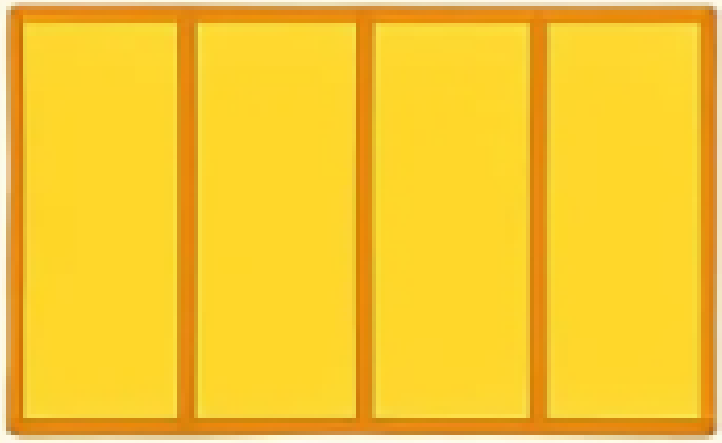
You do

1)Shade ½ of the rectangle



What do you notice?
Are they equivalent?

1)Shade 2/4 of the rectangle



_____ = _____

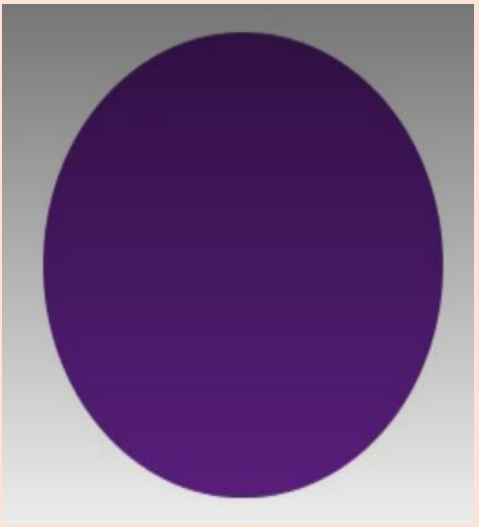
Challenge: True or False? 1/2 and 3/6 are equivalent.

We do

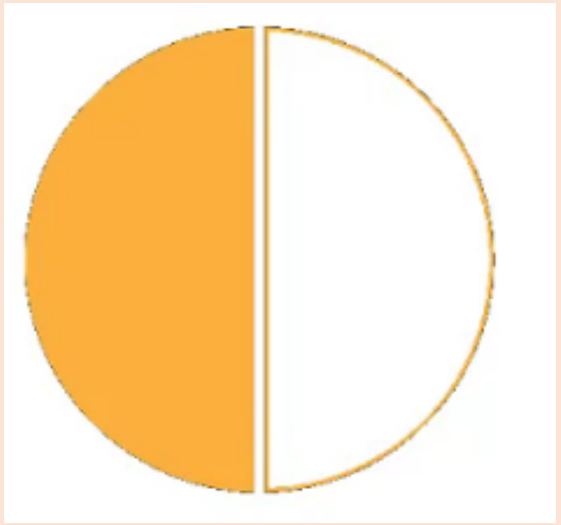
$$\frac{5}{\quad} = \frac{10}{12}$$

Challenge: Sam says, "Because 5/10=6/12 , the numerator and denominator must always increase by the same amount to make an equivalent fraction." Is Sam correct?

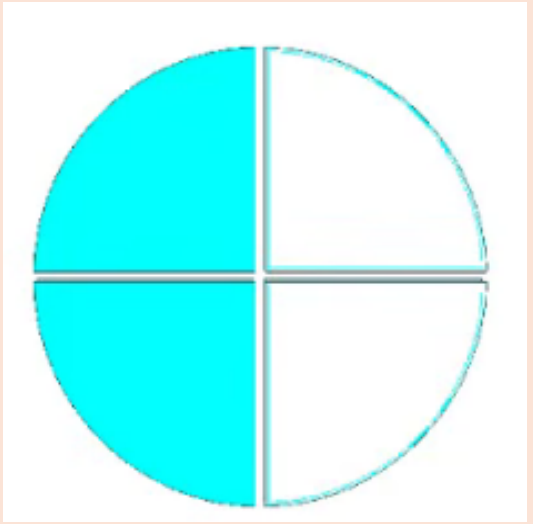
We do



This is representing 1 whole (1/1)



What fraction is being represented now?



What fraction is being represented now?



What fraction is being represented now?

On your whiteboards, write the equivalent fractions.

_____ = _____ = _____

You do

$$\frac{2}{8} = \frac{10}{?}$$

Challenge:

Three children have made equivalent fractions:

- Mia: 2/3
- Ben: 4/6
- Sofia: 8/12

Who is correct? How do you know?

Knowledge check

Answer the following question on your whiteboard

$$\frac{7}{9} = \frac{14}{?}$$

Challenge: Can you find three fractions equivalent to 5/10?
What pattern do you notice?

Independent

1. $\frac{1}{2} = \frac{\square}{4}$	2. $\frac{1}{12} = \frac{\square}{24}$	3. $\frac{1}{10} = \frac{\square}{20}$	4. $\frac{1}{8} = \frac{\square}{16}$
5. $\frac{3}{20} = \frac{\square}{40}$	6. $\frac{1}{6} = \frac{\square}{12}$	7. $\frac{1}{5} = \frac{\square}{10}$	8. $\frac{1}{4} = \frac{\square}{16}$
9. $\frac{3}{10} = \frac{\square}{20}$	10. $\frac{1}{3} = \frac{\square}{12}$	11. $\frac{7}{20} = \frac{\square}{40}$	12. $\frac{3}{8} = \frac{\square}{16}$

Challenge

The Count likes to count in fractions.

He likes everything to be the same.

What would the next four equivalent fractions be in these patterns?

$\frac{7}{8} = \frac{14}{16} = \frac{21}{24} = \square = \square = \square = \square$

$\frac{2}{3} = \frac{4}{6} = \frac{6}{9} = \square = \square = \square = \square$



Mastery challenge

Myrtle needs to make a new spell. She throws some ingredients into the cauldron.

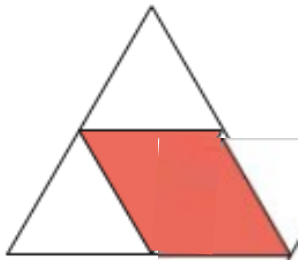
She needs $\frac{2}{9}$ of a bottle of lizard tongue juice.

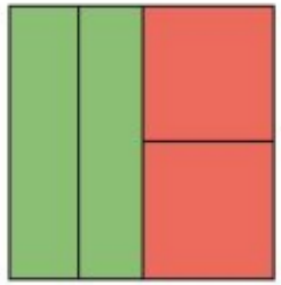
There is 45ml in a full bottle.

How many mls does she need to add to the spell?

RP:

What's the same? What's different?





The first shape represents the fraction .....

Greater Depth mastery

A wizard says:

"I have a fraction equivalent to 3/4.

The numerator and denominator add to 56."

What could the fraction be?

Convince me that your answer is correct.

Monday 3rd November 2026

Spelling rule

Words with a /shuhn/ sound, spelt with **‘sion’** (if root word ends in **‘se’, ‘de’ or ‘d’**)

For example,

Fu**se** – fusion

Corro**de** - corrosion

Expan**d** - expansion

Spelling words with definition

Expansion – when something gets bigger or grows in size.
Extension – an extra part added to make something longer or bigger.
Comprehension – understanding what you have read or heard.
Tension – a feeling of worry, stress, or excitement.
Corrosion – when metal is slowly damaged or eaten away by rust or chemicals.
Supervision – when someone watches over others to keep them safe or help them.
Fusion – when two or more things join together to become one.
Conclusion – the ending of something or a final decision.
Persuasion – trying to convince someone to think or do something.
Suspension – when something is stopped or paused for a period of time.

Handwriting



Warm up – fine warm up – fists then stretch



Posture – are you sitting reading to write?
Write each word twice using joined letters in your handwriting book.

Right-handed posture





Left-handed posture

expansion

extension

comprehension

tension

corrosion

supervision

fusion

conclusion

persuasion

suspension

Challenge – Write each word in a full sentence.

Tuesday 3rd November 2026

TBAT: make predictions about a text.

3 in 3

Philip Pullman is a British author best known for his fantasy books. He became famous for *His Dark Materials*, a book series that has captivated readers worldwide. However, Pullman has also written many other books for younger readers, including *The Firework-Maker's Daughter*. This story follows a young girl named Lila, who dreams of becoming a firework-maker like her father. It's a magical adventure about courage, friendship and following your dreams. Pullman's writing is known for its rich imagination and strong characters.

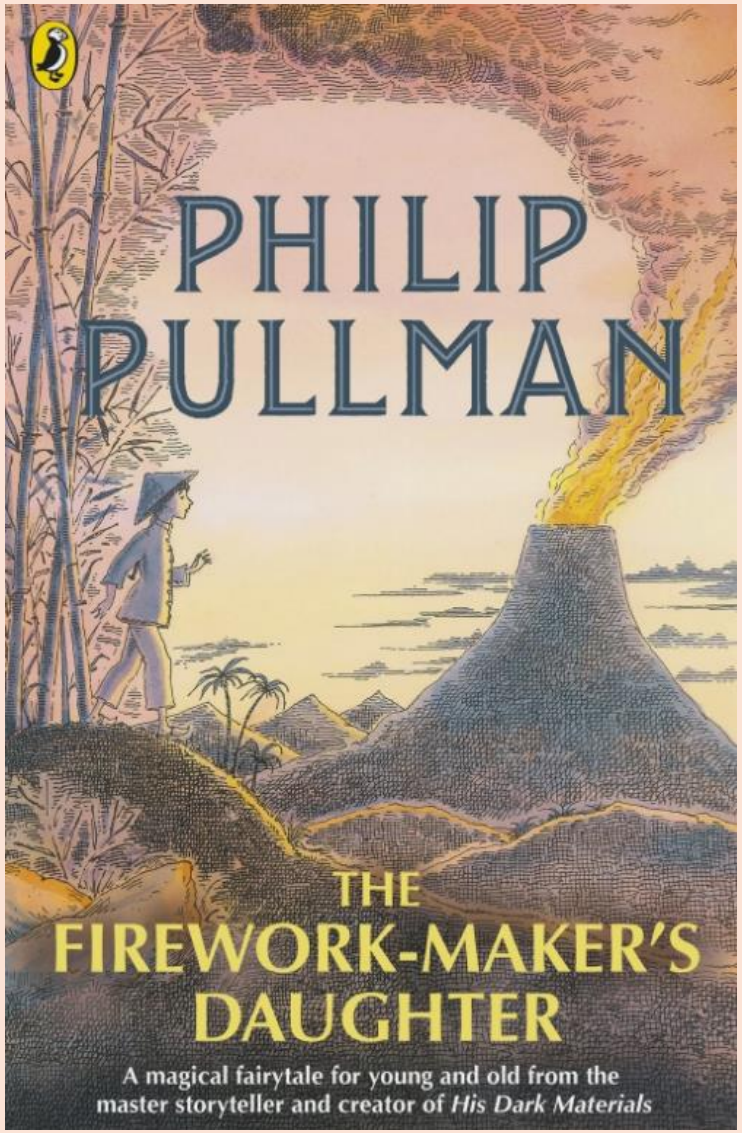
1) **What is the name of the protagonist in *The Firework-Maker's daughter?***
2) **Which book series made Philip Pullman famous?**
3) **What themes can be found in *The Firework-Maker's Daughter*?**

CHALLENGE

In the text, the word *"captivated"* is used to describe how *His Dark Materials* has affected readers. What does *captivated* most nearly mean in this context?

Tuesday 3rd November 2026

TBAT: make predictions about a text.



Look at the front cover.
Turn and talk, then answer these questions in you
book. You have 1 minute.

1. What do you think the book will be about?

I think the book will be about _____

2. What things can you see on the front cover?

On the front cover, I can see _____

3. What sort of story will it be?

I think this will be a/an _____ story because _____.

Now read the blurb and answer these questions in your book.

4. Were any of your predictions correct?

Yes, I was correct in saying that

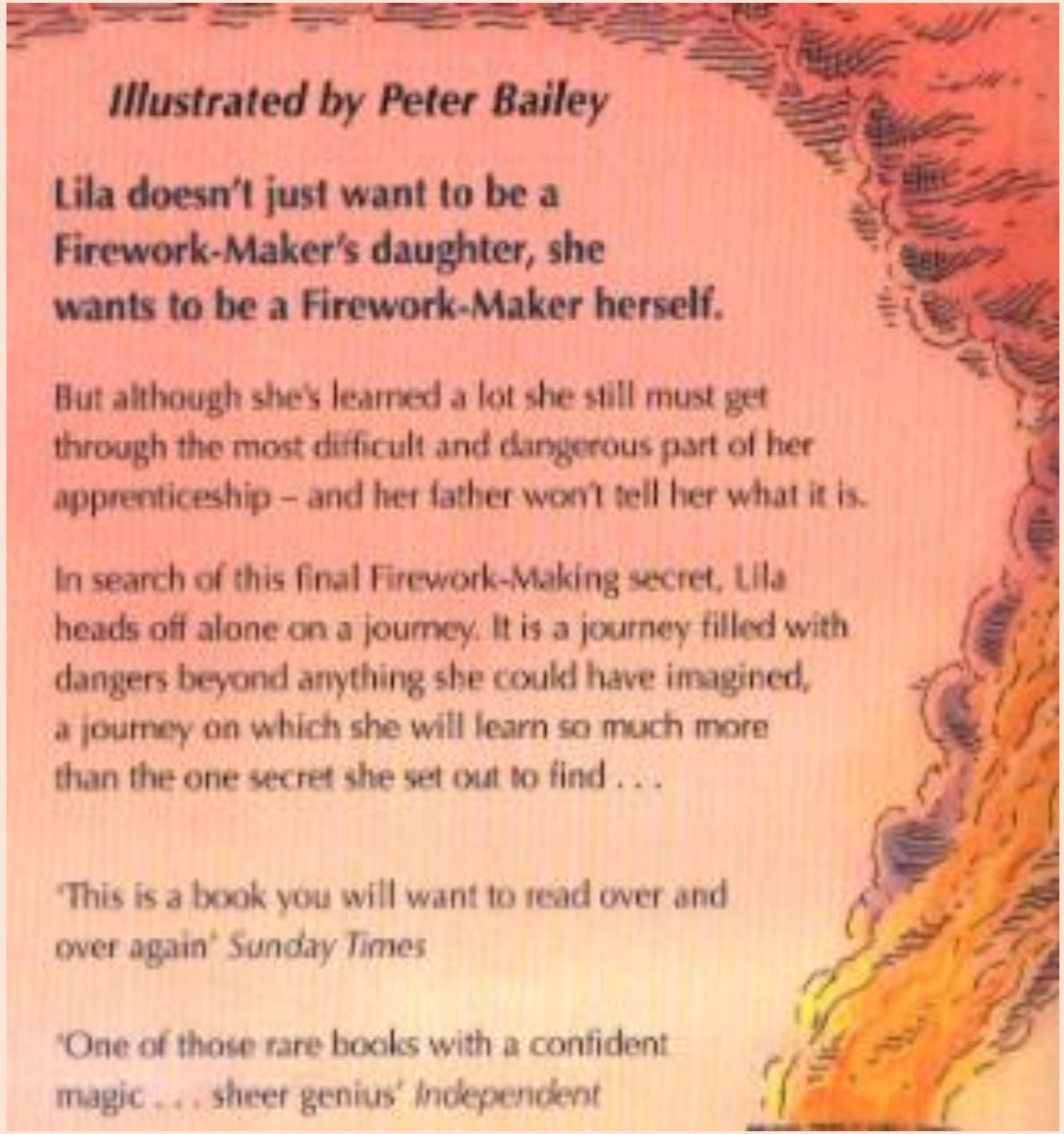
_____

OR

I was incorrect with my predictions because the blurb says _____

5. What qualities do you think Lila will need to succeed on her journey?

The qualities Lila will need are _____



Illustrated by Peter Bailey

Lila doesn't just want to be a Firework-Maker's daughter, she wants to be a Firework-Maker herself.

But although she's learned a lot she still must get through the most difficult and dangerous part of her apprenticeship – and her father won't tell her what it is.

In search of this final Firework-Making secret, Lila heads off alone on a journey. It is a journey filled with dangers beyond anything she could have imagined, a journey on which she will learn so much more than the one secret she set out to find . . .

'This is a book you will want to read over and over again' *Sunday Times*

'One of those rare books with a confident magic . . . sheer genius' *Independent*

Tuesday 3rd November 2026

TBAT: make predictions about a text.



Vocabulary/phrases in the text

Cradle - A small bed for a baby.

Somersault- A movement where you turn your body upside down.

Courtier- A person who works at a royal court, often a servant or advisor to the king or queen.

Rickshaw-drivers- People who drive rickshaws, which are small carts pulled by a person.



Detest- To strongly dislike something or someone.

Solemn- Serious, not showing much emotion.

Read chapter 1

Tuesday 3rd November 2026

TBAT: make predictions about a text.

Multiple choice

1. What was the firework makers name?

Tommy Lila Lalchand

2. Who was Hamlet in love with?

Chulak Lila Lalchand

3. Why was the white elephant a punishment?

It was rare and difficult to care for it could not make fireworks

Independent – Remember to answer in full sentences

1) Do you think Lila will be able to prove her father wrong and become a firework-maker? Why or why not?
2) How do you think the relationship between Lila and her father will change throughout the story?
3) What challenges do you predict Lila will face in her quest to learn the secret of firework-making?
4) Predict what the final secret of firework making might be.

Challenge:

Lila really wants to become a firework-maker, but her father doesn't think it's a good idea for her.

How do you think Lila's adventure might show that girls can do anything they set their minds to?

What do you think she will learn about herself by the end of the story?

Tuesday 3rd November 2026

TBAT: speak and clap a rhythm cycle in time.

Keywords

taal	a rhythm cycle that measures musical time in Indian music
bol	a spoken syllable used to recite the rhythm (from ‘bolna’, the Hindi word for ‘speak’)
tabla	 a set of two drums on which the taal is played with the hands

'Clap. Stomp. Shh.' LEVEL 1

1. Chant to 8 to a steady pulse. Repeat 4 times.
2. Swap chanting '1' for a clap. Repeat 4 times.
3. Additionally, swap '5' for a stomp. Repeat 4 times.
4. Additionally, swap '6' for a rest (silence). Repeat 4 times.

clap	2	3	4	stomp	shh	7	8

Task A

Warming up so we're ready for music

Practice

'Hi Lo Chickalo'



Face a partner. Place your left hand to touch the back of your partner's left hand.

Hi - clap your right hands together above your joined hands.

Lo - clap your right hands together below your joined hands.

Chicka - clap your own hands together twice.

Identifying taals, raags and drones

Explanation

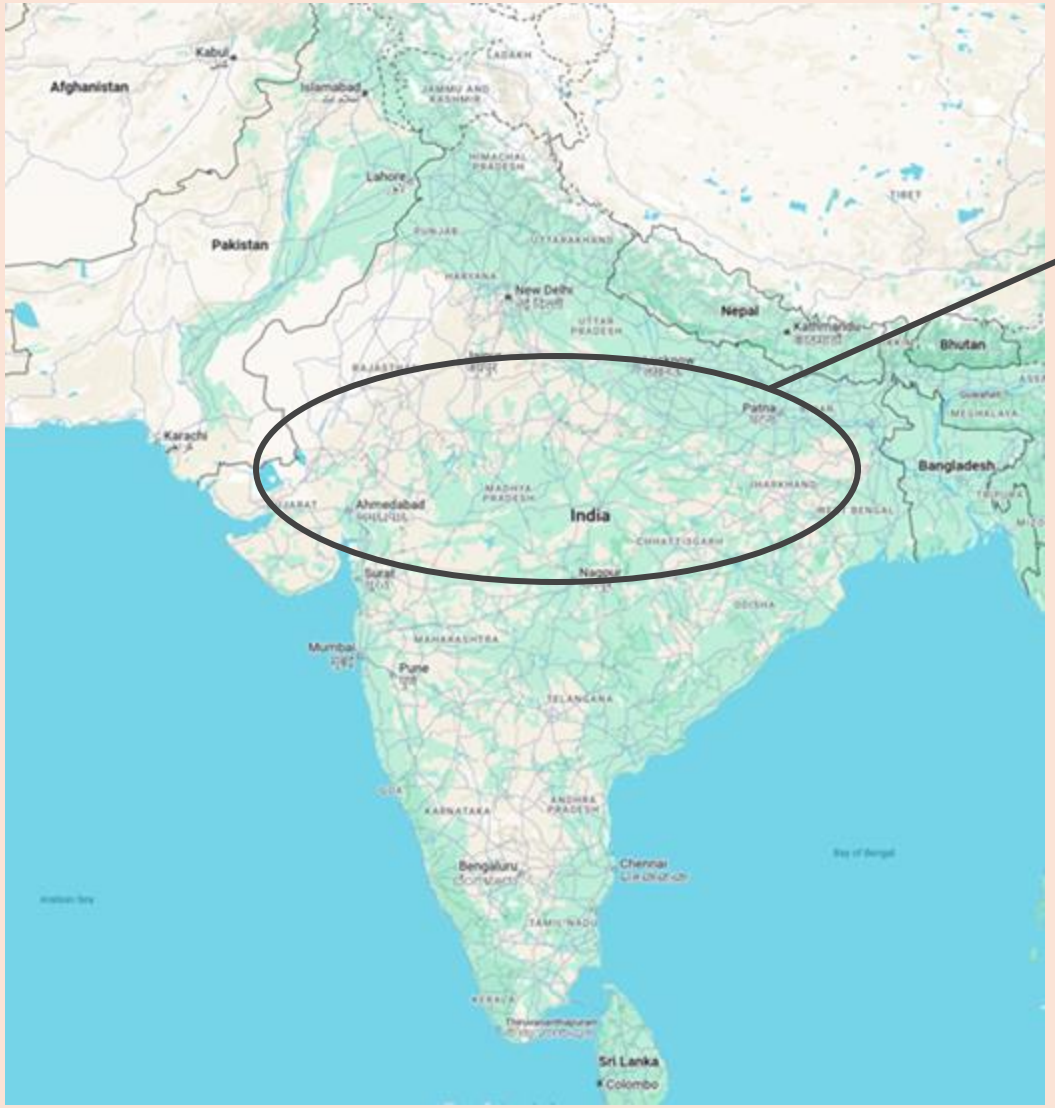


Image: Map data © 2024 Google

Hindustani classical music is music from North India.

The three main components of this music are **taal**, raag and drone.

There are three key sounds to listen for.

The drone
(constant sound)



is played on a tanpura.

The raag
(melodic structure)



is played on a sitar.

The **taal**
(rhythm cycle)



is played on the **tabla**.

Left Photo: A pair of female vocal tanpuras by Martin Spaink; licensed under CC-BY SA 3.0. Middle Photo: Sitar, late 19th Century by Met Museum; licensed under CC0 1.0. Right Photo: Prop Tabla by Pakrashi; CC-BY SA 3.0; cropped and colour-enhanced



Image: A pair of female vocal tanpuras by Martin Spaink; licensed under CC-BY SA 3.0.

tanpura:

string instrument playing the drone

drone:

a constant sound on which everything else is based and connected to



Image: Prop Tabla by Pakrashi; CC-BY SA 3.0; cropped and colour-enhanced.

tabla:

the two drums playing the **taal**

taal:

the rhythm cycle

This example of a **taal** is called **Ektaal**. It is a 12 beat rhythm cycle, played by Jeevan.

1. Listen to these three clips.
What can you hear being played?

Draw lines to connect your answers.

a 

taal

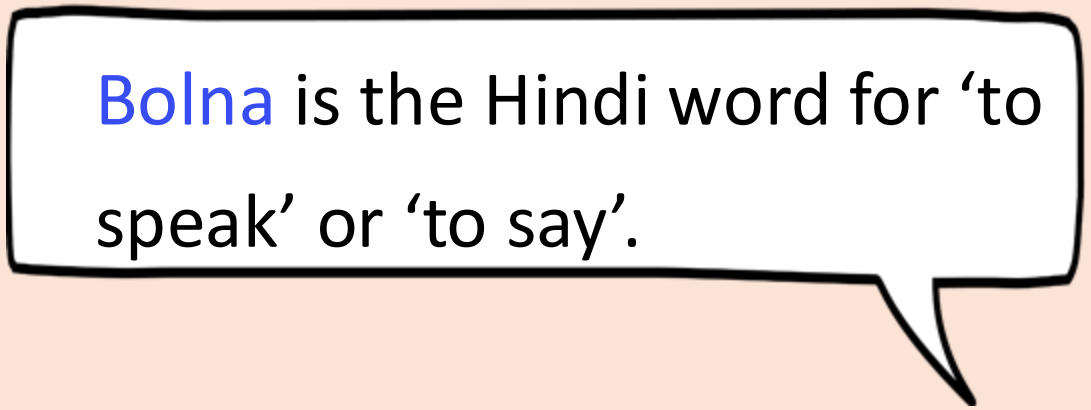
b 

raag

c 

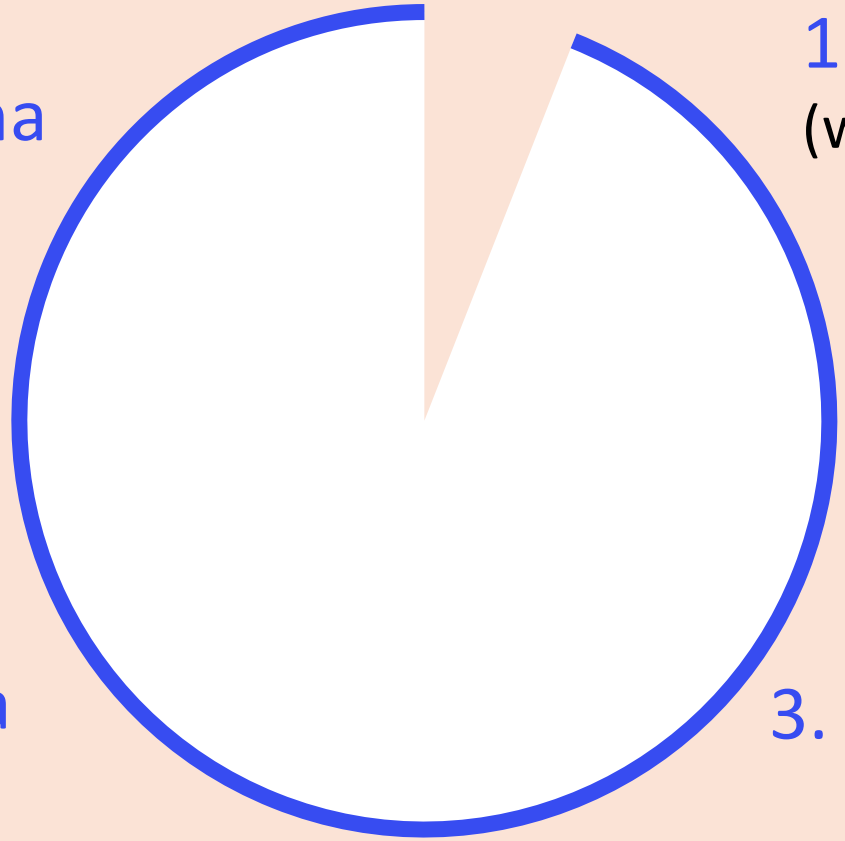
drone

The **bols** represent the sounds that the **tabla** drums make.



Sofia

This rhythm cycle is called Rupak **Taal**. It has 7 beats in its cycle.



1. tin (wave)
2. tin
3. na
4. dhin (clap)
5. na
6. dhin (clap)
7. na

We can say the beats or **bols**.

Practise the **bols** together with Samir.

Every Indian rhythm cycle or **taal** has a system of clapping or waving your hands.

Say the rhythms out loud as you clap and wave.

Practise again. How precise can you be?



TeenTaal: a 16 beat rhythm cycle.

Join in counting and speaking the **bols**.

Dha Dhin Dhin Dha	Dha Dhin Dhin Dha	Dha Tin Tin Ta	Ta Dhin Dhin Dha
clap	clap	wave	clap

Add the claps and the wave alongside the **bols**.

1. Clap or chant Teen**Taal** to this **tabla** track.

The rhythm cycle will run 3 times - wait for the count to 16 first. Split into two groups.

Group 1:

Clap, 2, 3, 4, | Clap, 2, 3, 4, | Wave, 2, 3, 4, | Clap, 2, 3, 4

Group 2:

Dha Dhin Dhin Dha | Dha Dhin Dhin Dha | Dha Tin Tin Ta | Ta Dhin Dhin Dha

Tuesday 3rd November 2026

TBAT: make reverse motion linkages.

Keywords

mechanism	a set of moving parts that make something happen
lever	a mechanism which creates movement
pivot	a point around which an object moves or rotates
linkage	a mechanism connecting levers together
reverse motion linkage	a linkage that creates movement in opposite directions

Key features of levers

Explanation

A **lever** is a simple **mechanism** that helps us move things.



How does this seesaw work?

Main sections of a seesaw



The **lever** is a rigid (hard to bend) bar.

The **lever** sits on a point called a fulcrum, or **pivot** point.

How a seesaw works



The **pivot** point allows the **lever** to rotate, moving up and down.



Sam

The children on either side create the effort and make each other go up and down.

Key features of levers

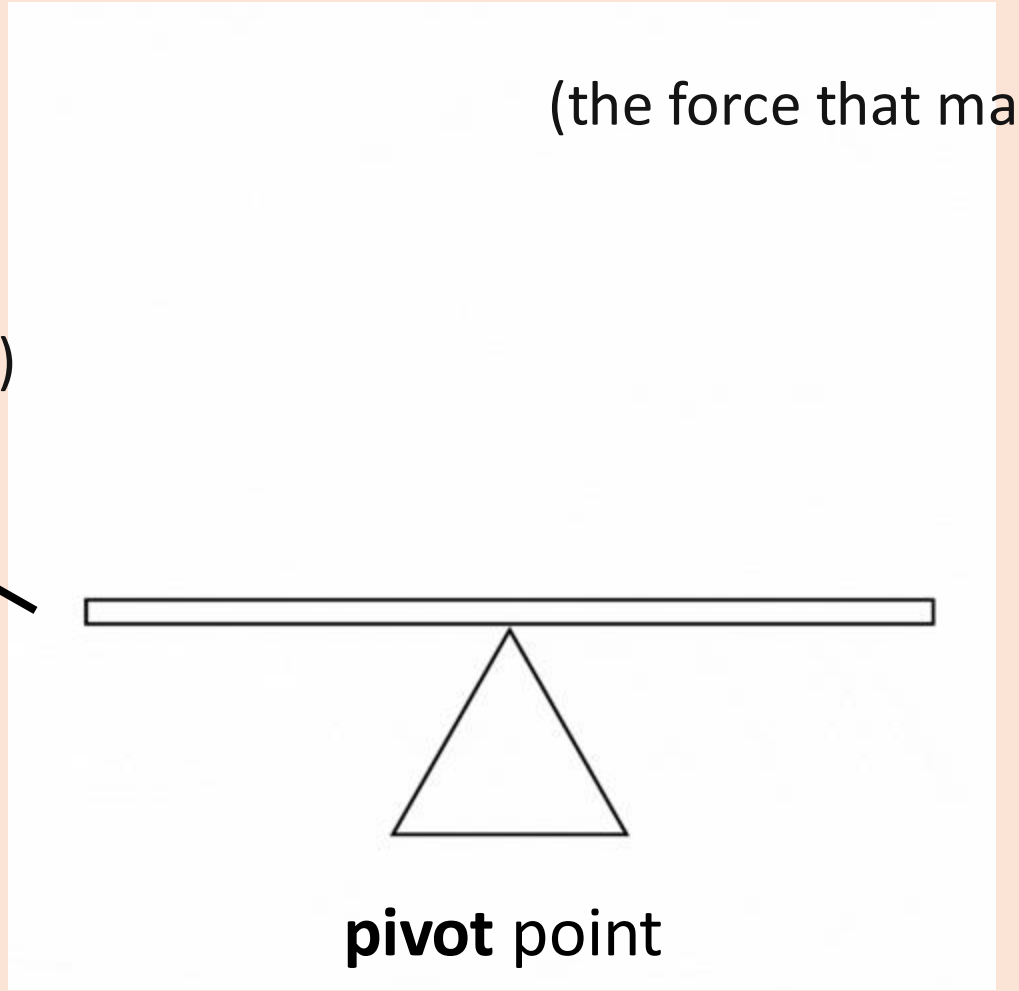
Explanation

effort

(the force that makes the **lever** work)

load

(the object to be moved)



pivot point

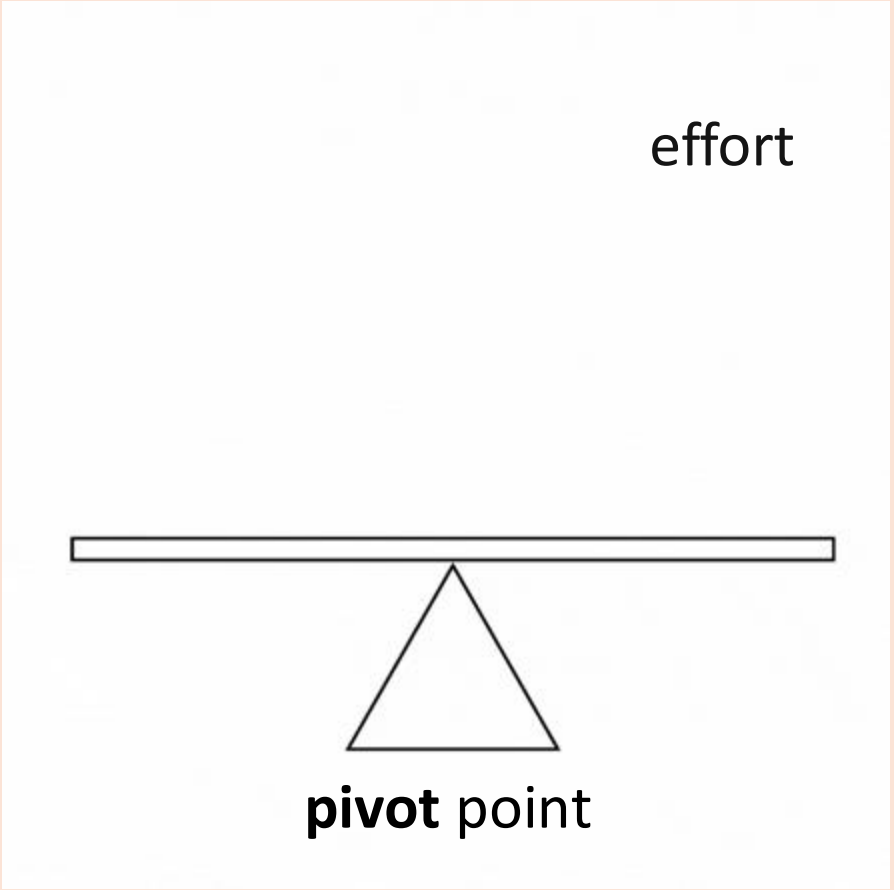
Key features of levers

Explanation

Levers can be classed in three ways.

A class one **lever** has the fulcrum in the middle.

load

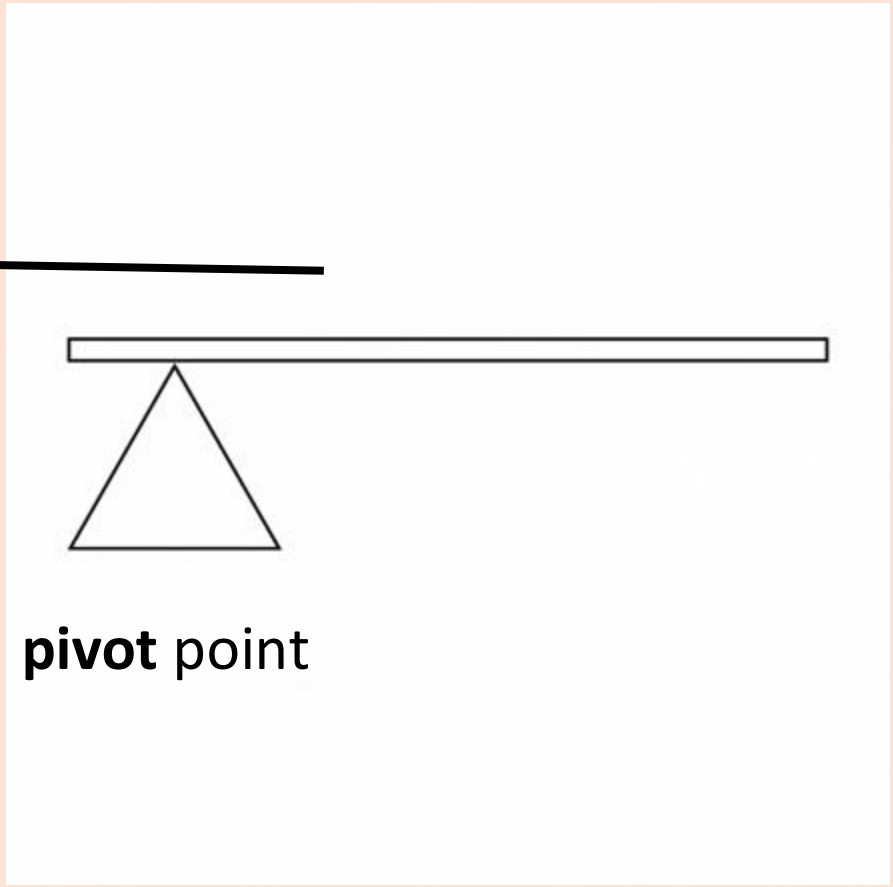


Key features of levers

Explanation

Levers can be classed in three ways.

A class two **lever** has the load in the middle.

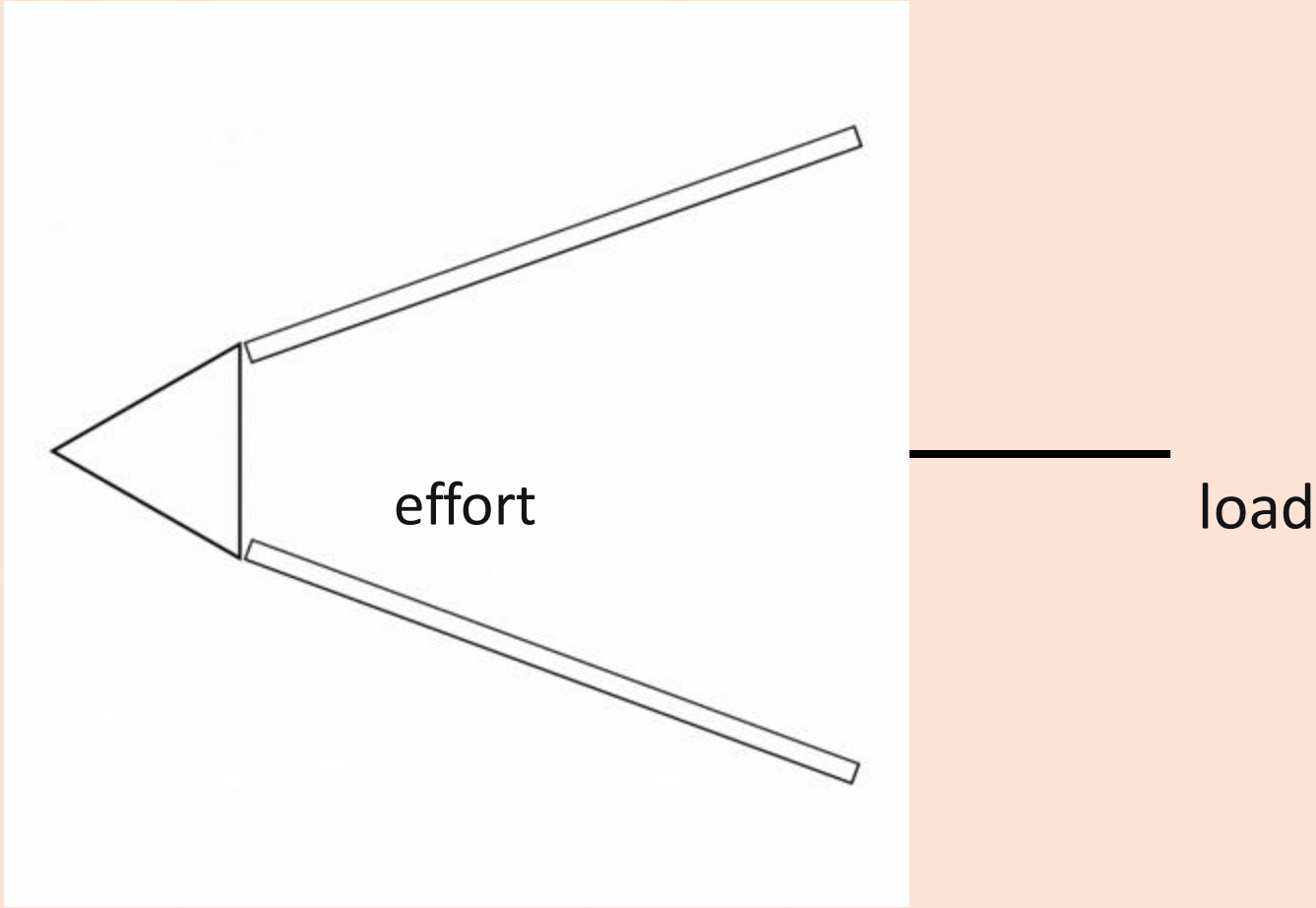


Key features of levers

Explanation

Levers can be classed in three ways.

A class three **lever** has the effort in the middle.

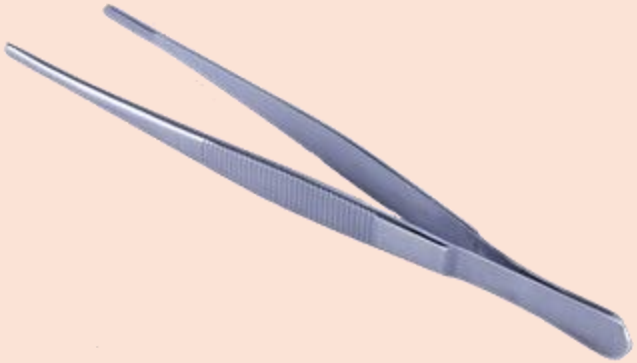


1) Where is the **pivot** point, load and effort on the different types of **levers** below?

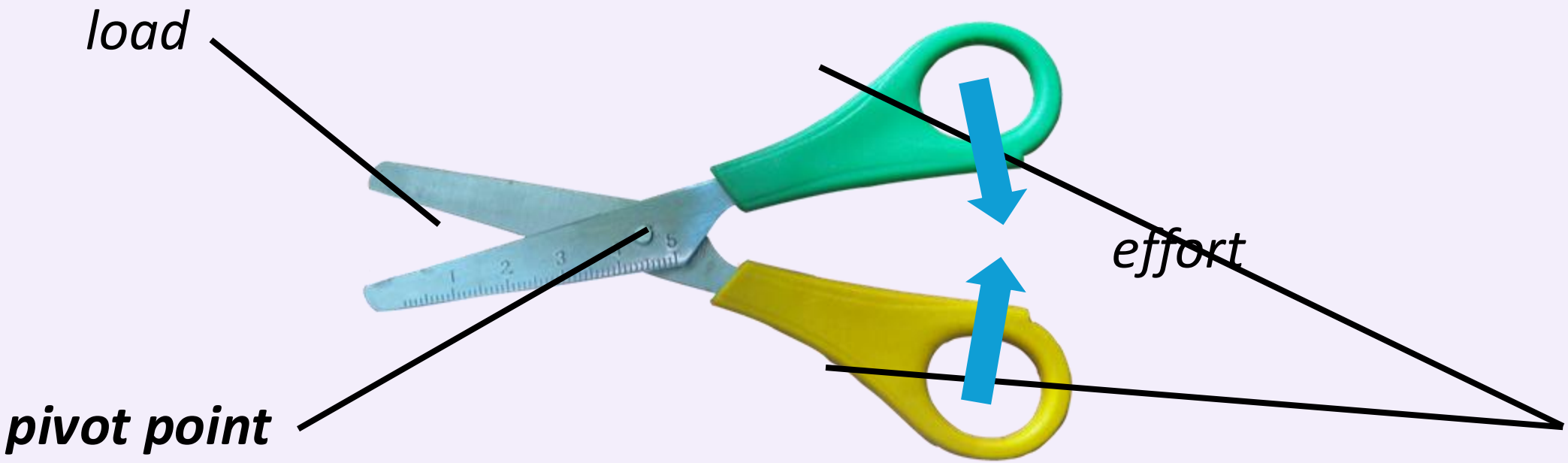
2) State which class of **lever** these objects belong to and how you know.







1)



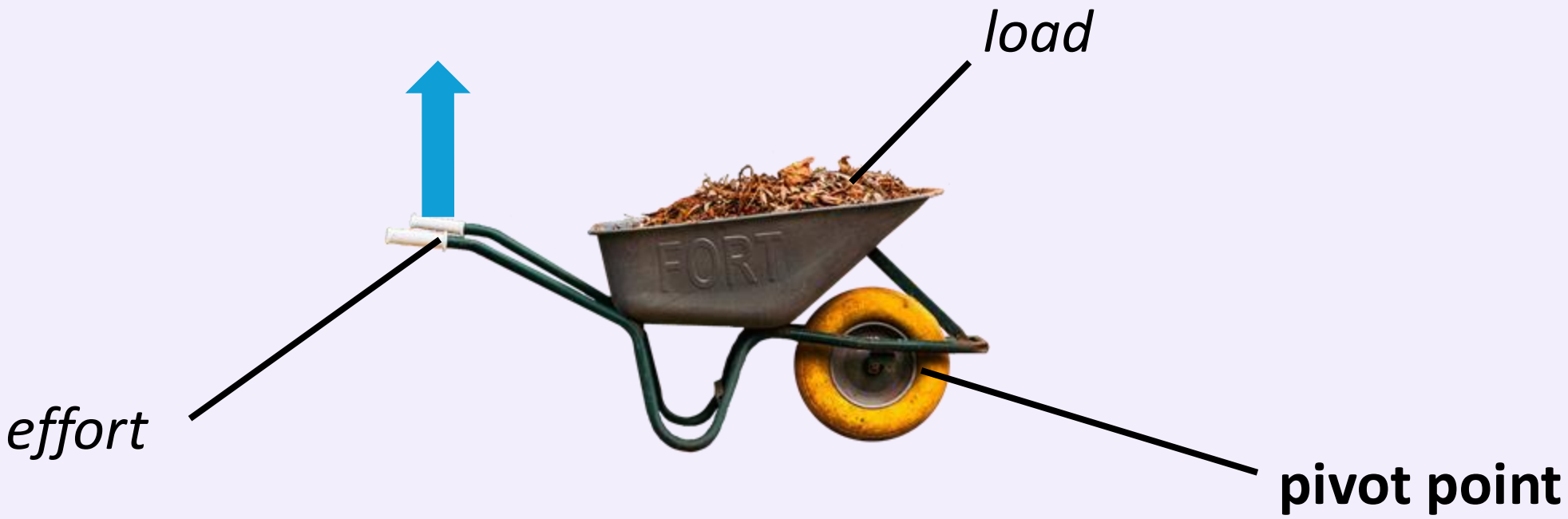
2) This is a class one **lever** - the **pivot point** is in the middle. A pair of scissors is made up of two **levers** joined at the fulcrum.

Task A

Key features of levers

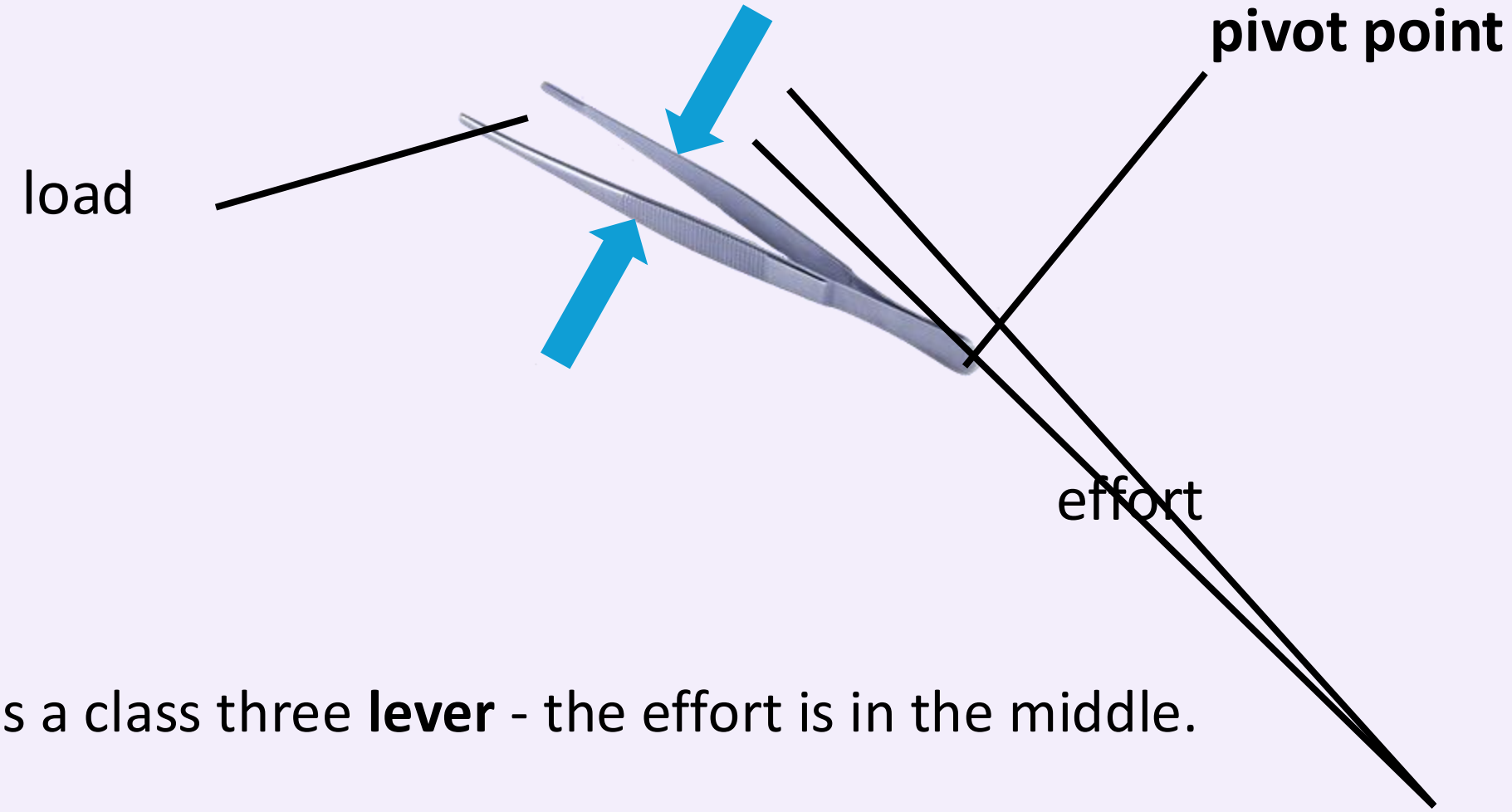
Feedback

1)



2) This is a class two **lever** - the load is in the middle.

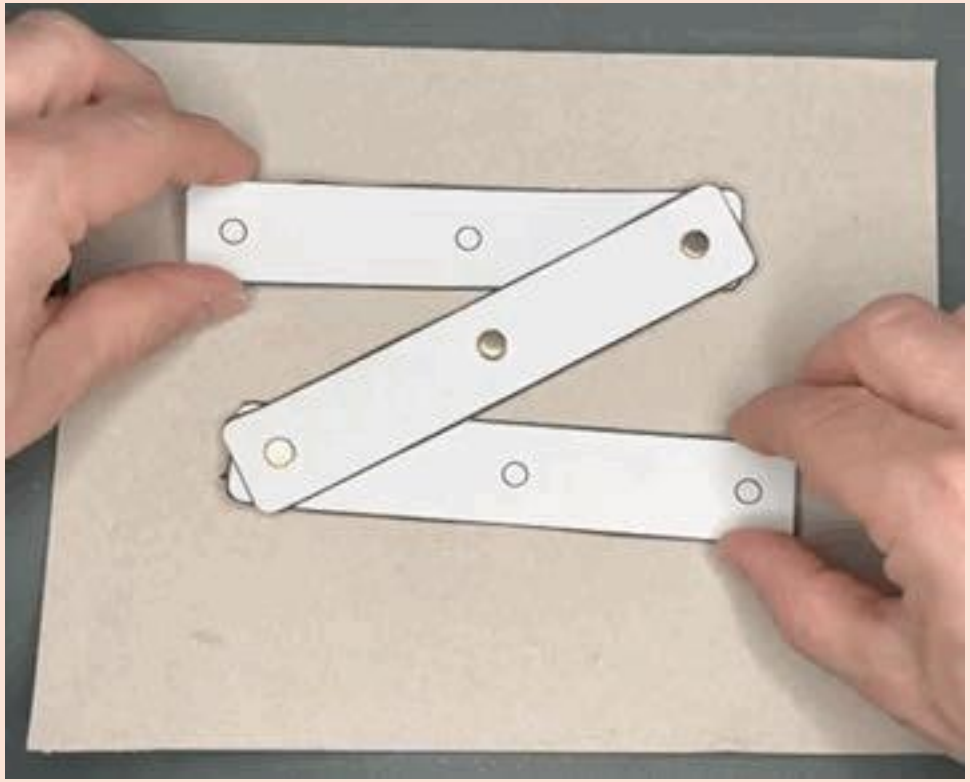
1)



2) This is a class three **lever** - the effort is in the middle.

Key features of reverse motion linkages

Explanation



Levers can be joined to create **linkage mechanisms** using **pivot** points.

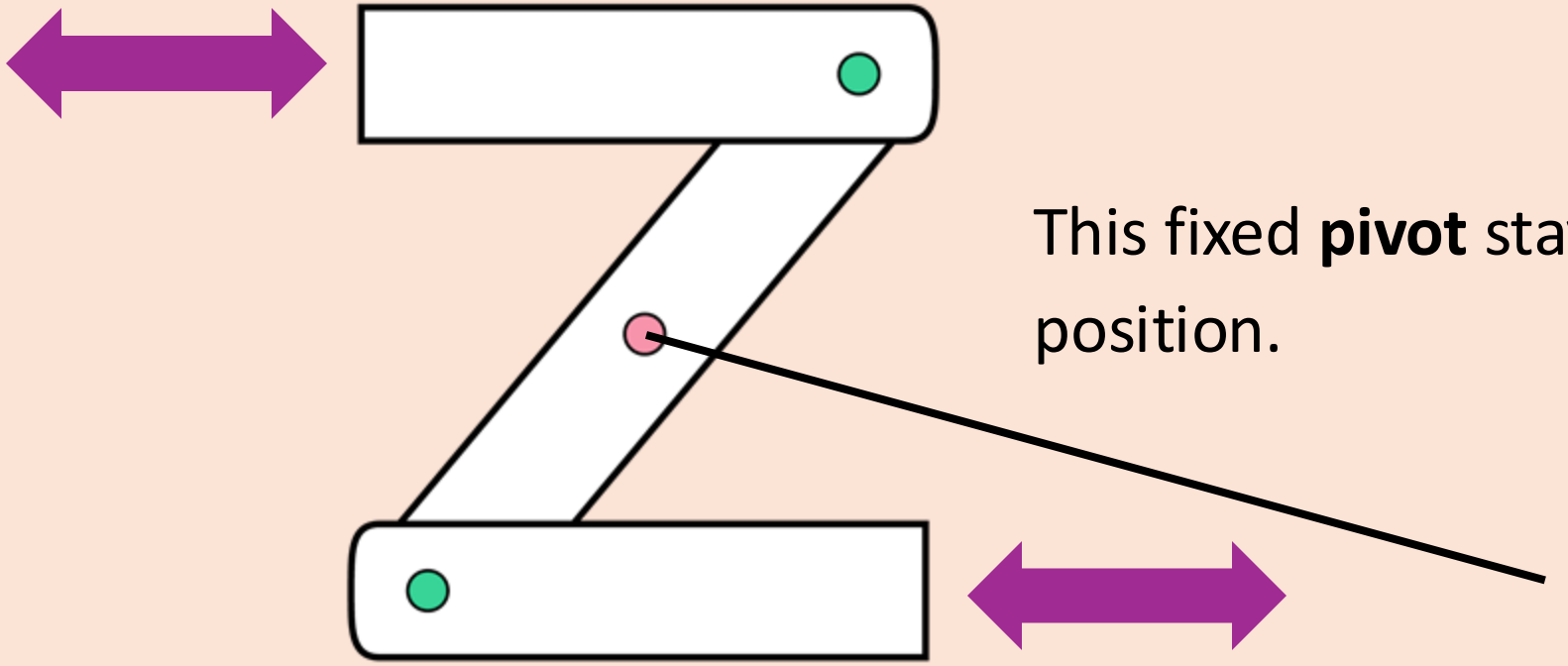
There are different types of **linkages** which create different movements.

Key features of reverse motion linkages

Explanation

One type of **linkage** is a **reverse motion linkage**.

It has one fixed **pivot** which the **linkage** rotates around.

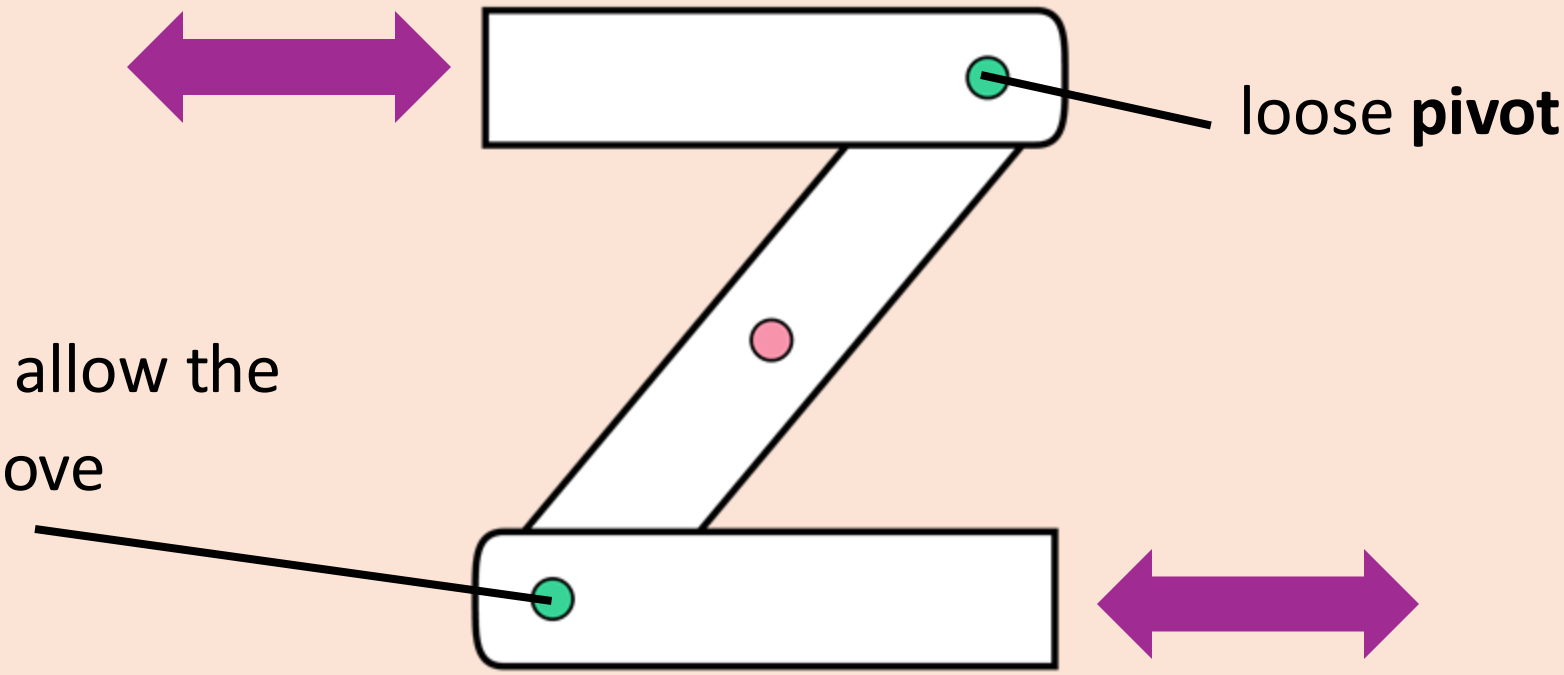


This fixed **pivot** stays in position.

Key features of reverse motion linkages

Explanation

A **reverse motion linkage** also has two loose **pivots** which allow movement.

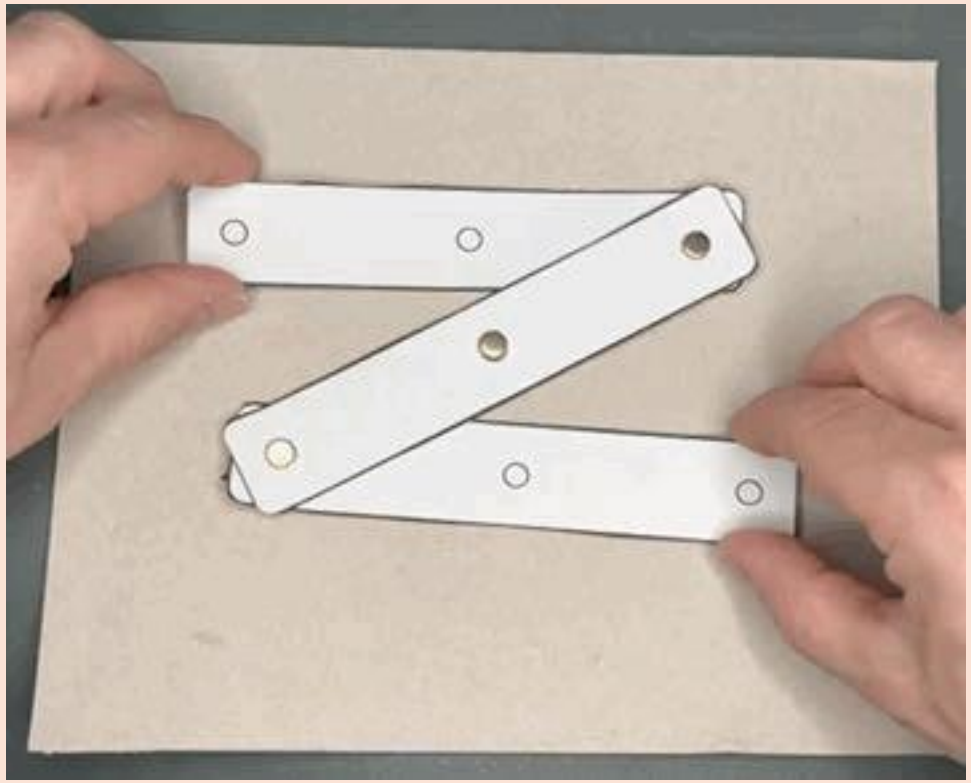


Key features of reverse motion linkages

Explanation

Reverse motion linkage input and output

input



output

The top and bottom **levers** also move up and down slightly.



Sam

Making a reverse motion linkage

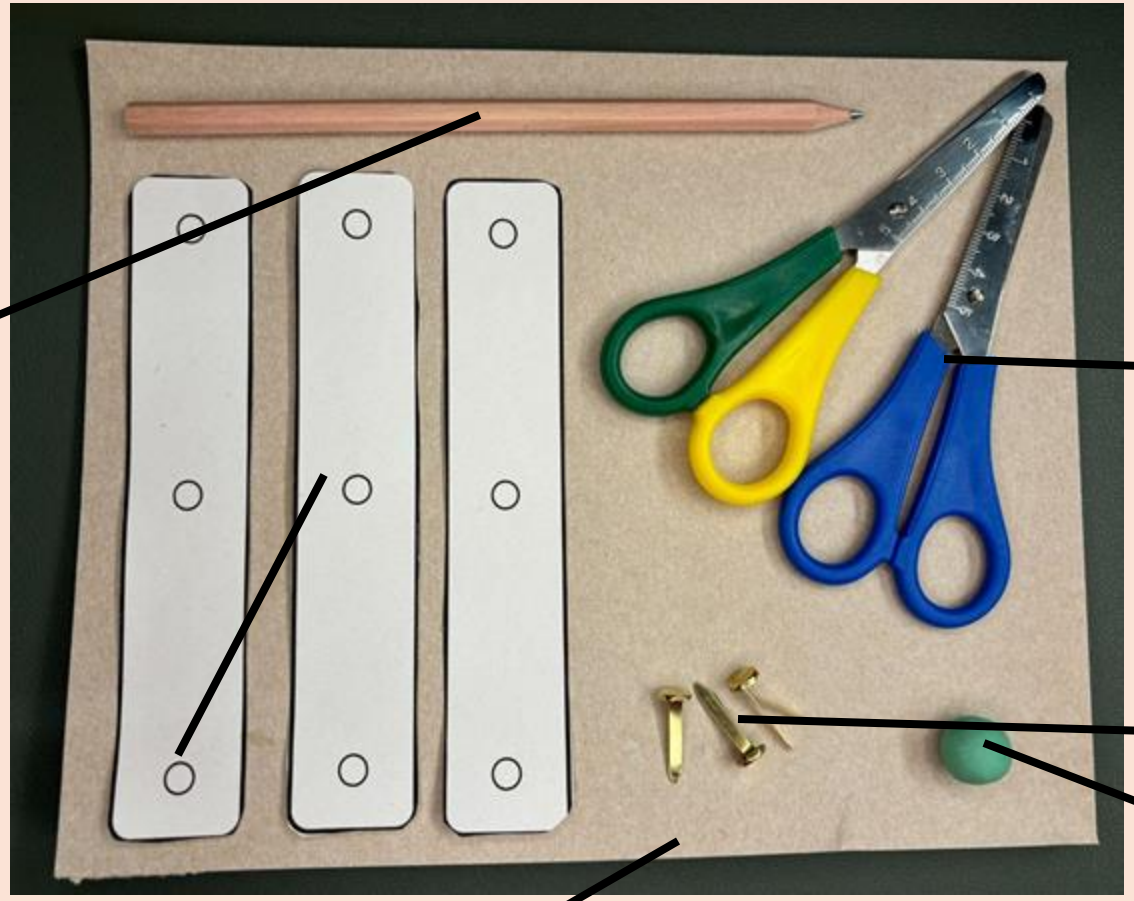
Explanation

Materials and tools needed to make the **linkage:**

pencil

strips of card

card from a cereal box



scissors

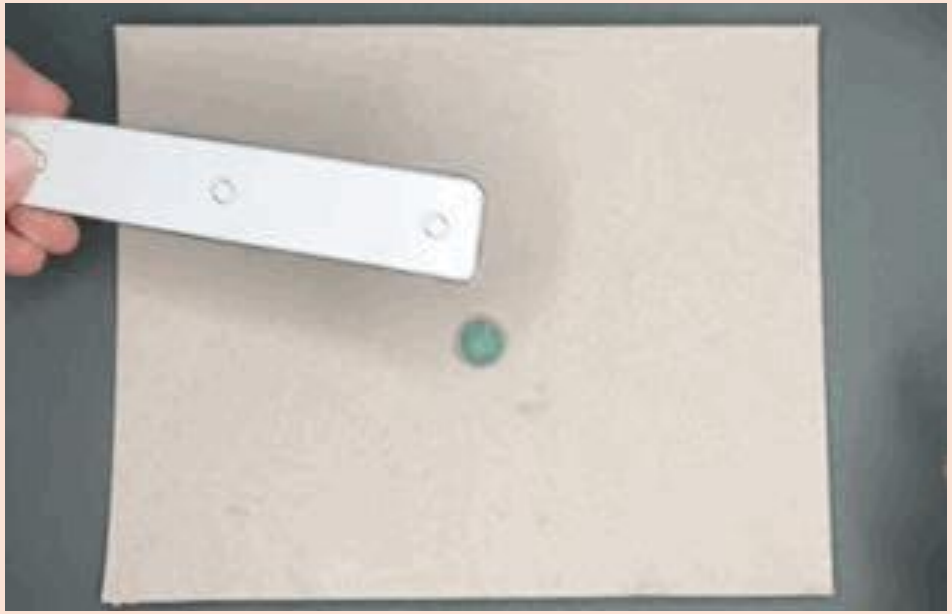
split pins

~~sticky tack~~

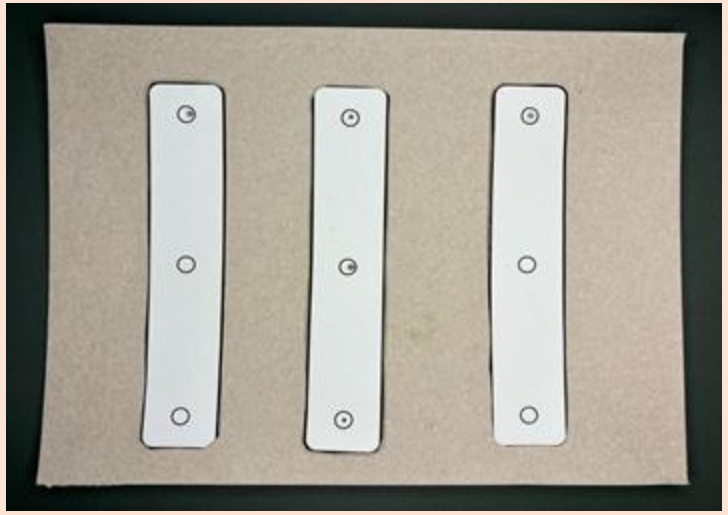
Making a reverse motion linkage

Explanation

To safely and accurately make a hole in paper or card for split pins to go through, place sticky tack underneath and use a pencil to make the pilot hole.



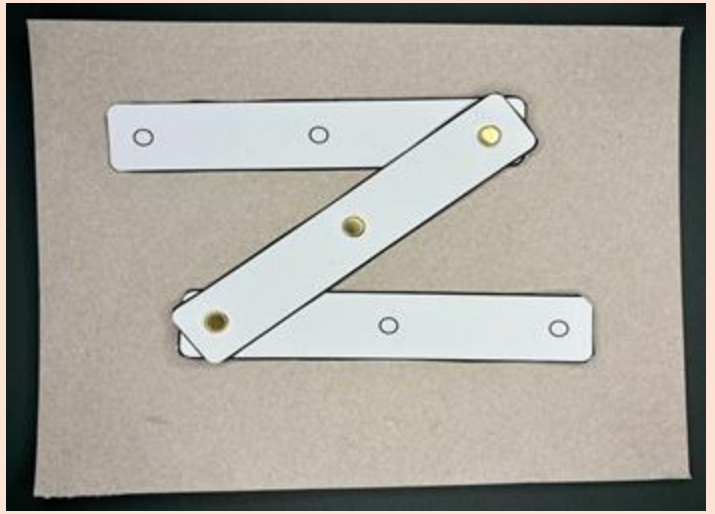
Stages of assembling a **reverse motion linkage**



Prepare holes carefully



Create the loose **pivots**



Attach the fixed **pivot** to the card

Tuesday 3rd November 2026

TBAT: develop individual and partner balances.

You have 4 MINUTES to get changed into your full PE kit – **silently!**

1st- receive 5 marbles
2nd- receive 4 marbles
3rd- receive 3 marbles
4th- receive 2 marbles
5th- receive 1 marble

Please collect the marbles from your own classroom.

4 min timer

4 Minute Timer with Relaxing Chillpop Music | Gentle Focus Timer for Classroom

Tuesday 3rd November 2026

TBAT: develop individual and partner balances.

Success Criteria

- Strong body tension will help you to hold balances with increased control.

