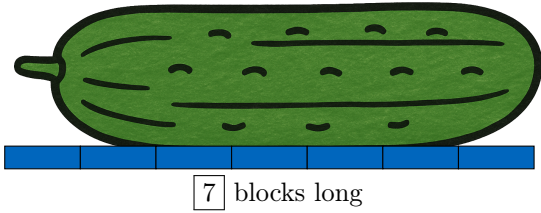


LENGTH

A DEFINITION

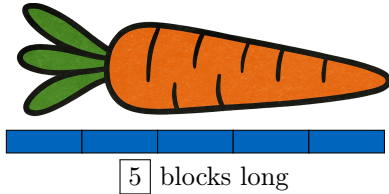
A.1 MEASURING LENGTHS WITH BLOCKS

Ex 1: How long?



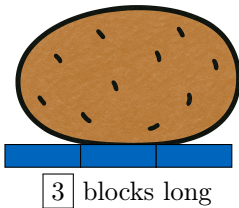
Answer: The cucumber measures 7 blocks long.

Ex 2: How long?



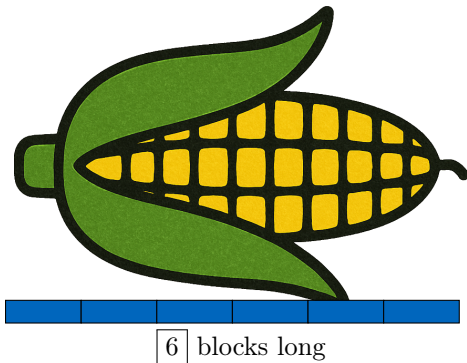
Answer: The carrot measures 5 blocks long.

Ex 3: How long?



Answer: The potato measures 3 blocks long.

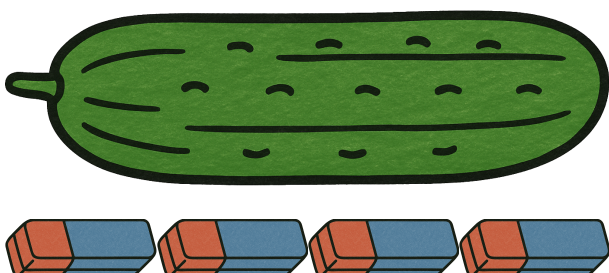
Ex 4: How long?



Answer: The corn measures 6 blocks long.

A.2 MEASURING LENGTHS WITH ERASERS

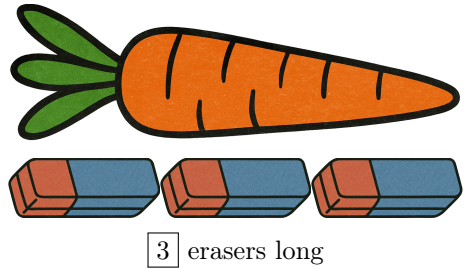
Ex 5: How long?



4 erasers long

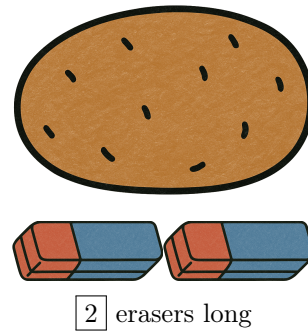
Answer: The cucumber measures 4 erasers long.

Ex 6: How long?



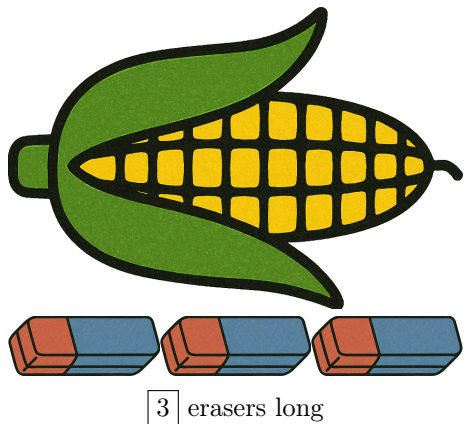
Answer: The carrot measures 3 erasers long.

Ex 7: How long?



Answer: The potato measures 2 erasers long.

Ex 8: How long?



Answer: The corn measures 3 erasers long.

B LENGTH UNITS

B.1 CHOOSING LENGTH UNITS

MCQ 9: Which unit will be used to measure how long a pencil is?

Choose 1 answer:

- ☐ Millimeters
- ☒ Centimeters
- ☐ Meters

☐ Kilometers

Answer: Centimeters will be used to measure how long a pencil is.

MCQ 10: Which unit will be used to measure the distance between two cities?

Choose 1 answer:

- ☐ Millimeters
- ☐ Centimeters
- ☐ Meters
- ☒ Kilometers

Answer: Kilometers will be used to measure the distance between two cities.

MCQ 11: Which unit will be used to measure how tall a tree is?

Choose 1 answer:

- ☐ Millimeters
- ☐ Centimeters
- ☒ Meters
- ☐ Kilometers

Answer: Meters will be used to measure how tall a tree is.

MCQ 12: Which unit will be used to measure the length of an ant?

Choose 1 answer:

- ☒ Millimeters
- ☐ Centimeters
- ☐ Meters
- ☐ Kilometers

Answer: Millimeters will be used to measure the length of an ant.

MCQ 13: Which unit will be used to measure how long a book is?

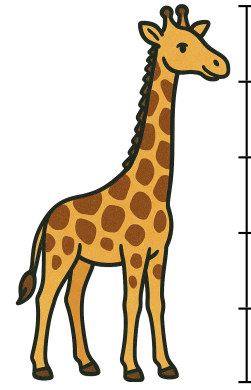
Choose 1 answer:

- ☐ Millimeters
- ☒ Centimeters
- ☐ Meters
- ☐ Kilometers

Answer: Centimeters will be used to measure how long a book is.

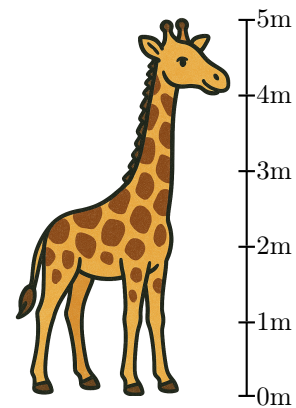
B.2 MEASURING

Ex 14:

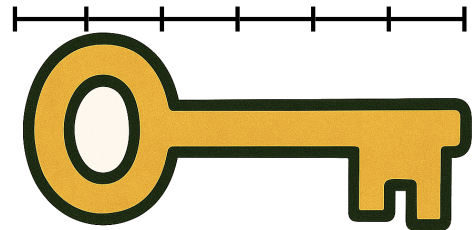


The giraffe measures tall.

Answer: The giraffe measures 5 meters tall.

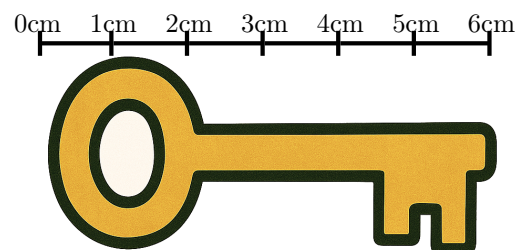


Ex 15:

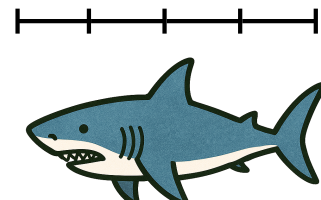


The key measures long.

Answer: The key measures 6 centimeters long.

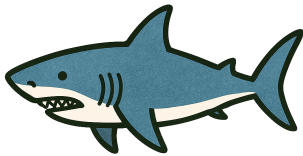
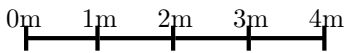


Ex 16:

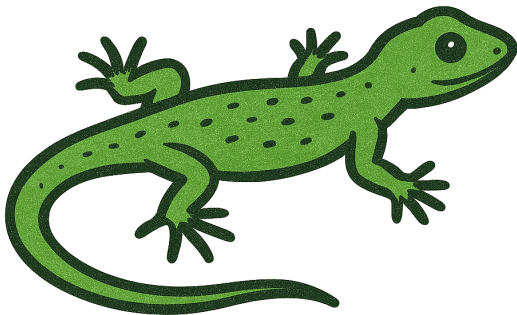


The shark measures **meters** long.

Answer: The shark measures 4 meters long.

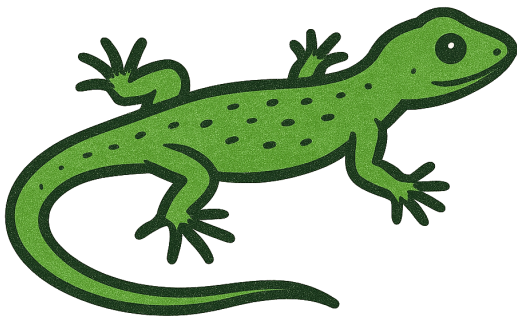
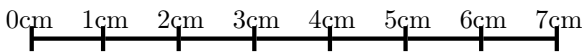


Ex 17:

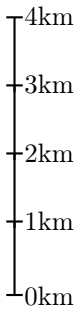
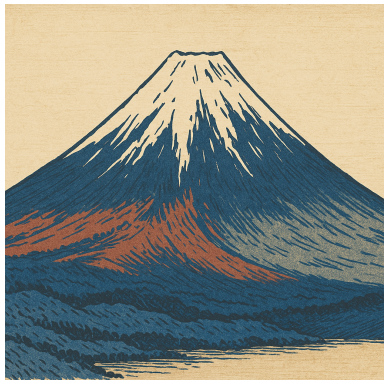


The lizard measures **centimeters** long.

Answer: The lizard measures 7 centimeters long.

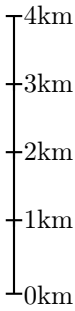


Ex 18:

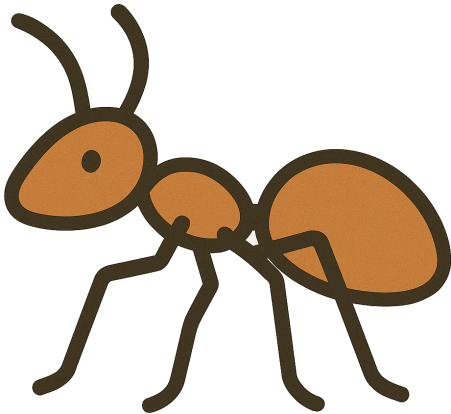
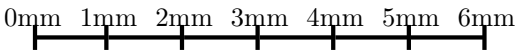


Mount Fuji measures **kilometers** tall.

Answer: Mount Fuji measures 4 kilometers tall.

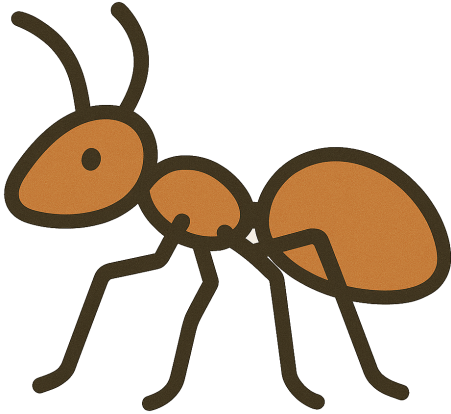
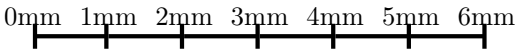


Ex 19:



The ant measures **millimeters** long.

Answer: The ant measures 6 millimeters long.



C CONVERSION OF LENGTH UNITS

C.1 CONVERTING UNITS OF LENGTH

Ex 20: Convert:

2 km = m.

Answer:



- *Multiplication Method:*

$$2 \text{ km} = 2 \times 1\,000 \text{ m} \\ = 2\,000 \text{ m}$$

- *Conversion Table Method:*

km			m		cm	mm
2	0	0	0			

So,

$$2 \text{ km} = 2\,000 \text{ m}$$

Ex 21: Convert:

$$4 \text{ m} = \boxed{400} \text{ cm.}$$

Answer:

- *Multiplication Method:*

$$4 \text{ m} = 4 \times 100 \text{ cm} \\ = 400 \text{ cm}$$

- *Conversion Table Method:*

km			m		cm	mm
			4	0	0	

So,

$$4 \text{ m} = 400 \text{ cm}$$

Ex 22: Convert:

$$300 \text{ cm} = \boxed{3} \text{ m.}$$

Answer:

- *Division Method:*

$$300 \text{ cm} = 300 \div 100 \text{ m} \\ = 3 \text{ m}$$

- *Conversion Table Method:*

km			m		cm	mm
			3	0	0	

So,

$$300 \text{ cm} = 3 \text{ m}$$

Ex 23: Convert:

$$4\,000 \text{ m} = \boxed{4} \text{ km.}$$

Answer:

- *Division Method:*

$$4\,000 \text{ m} = 4\,000 \div 1\,000 \text{ km} \\ = 4 \text{ km}$$

- *Conversion Table Method:*

km			m		cm	mm
4	0	0	0			

So,

$$4\,000 \text{ m} = 4 \text{ km}$$

Ex 24: Convert:

$$23 \text{ cm} = \boxed{230} \text{ mm.}$$

Answer:

- *Multiplication Method:*

$$23 \text{ cm} = 23 \times 10 \text{ mm} \\ = 230 \text{ mm}$$

- *Conversion Table Method:*

km			m		cm	mm
				23	0	

So,

$$23 \text{ cm} = 230 \text{ mm}$$

Ex 25: Convert:

$$6\,000 \text{ mm} = \boxed{6} \text{ m.}$$

Answer:

- *Division Method:*

$$6\,000 \text{ mm} = 6\,000 \div 1\,000 \text{ m} \\ = 6 \text{ m}$$

- *Conversion Table Method:*

km			m		cm	mm
			6	0	0	0

So,

$$6\,000 \text{ mm} = 6 \text{ m}$$

C.2 SOLVING PROBLEMS WITH UNIT CONVERSIONS

MCQ 26: Hugo and Louis go walking. Louis walks 5 000 meters, and Hugo walks 4 kilometers. Who did the longest walk?

☒ Louis

☐ Hugo

Answer: First, we need to compare their distances in the same unit. Let's convert Hugo's distance to meters. Hugo walks 4 km. Using the conversion table:

km			m		cm	mm
4	0	0	0			

So, $4 \text{ km} = 4\,000 \text{ m}$.

Now, compare:

- Louis: 5 000 m

- Hugo: 4 000 m

Since 5 000 m is more than 4 000 m, Louis did the longest walk.

MCQ 27: A giraffe is 5 meters tall, and a horse is 200 centimeters tall. Which animal is taller?

☒ Giraffe

☐ Horse

Answer: First, we need to compare their heights in the same unit.

Let's convert the horse's height to meters.

The horse is 200 cm tall. Using the conversion table:

km			m		cm	mm
			2	0	0	

So, $200 \text{ cm} = 2 \text{ m}$.

Now, compare:

- Giraffe: 5 m
- Horse: 2 m

Since 5 m is more than 2 m, the giraffe is taller.

MCQ 28: A snake is 3 meters long, and a crocodile is 400 centimeters long. Which animal is longer?

☐ Snake

☒ Crocodile

Answer: First, we need to compare their lengths in the same unit.

Let's convert the crocodile's length to meters.

The crocodile is 400 cm long. Using the conversion table:

km			m		cm	mm
			4	0	0	

So, $400 \text{ cm} = 4 \text{ m}$.

Now, compare:

- Snake: 3 m
- Crocodile: 4 m

Since 4 m is more than 3 m, the crocodile is longer.

MCQ 29: Emma walks 2 km to school, and Liam walks 3 000 meters to school. Who walks farther?

☐ Emma

☒ Liam

Answer: First, we need to compare their distances in the same unit. Let's convert Emma's distance to meters.

Emma walks 2 km. Using the conversion table:

km			m		cm	mm
2	0	0	0			

So, $2 \text{ km} = 2\,000 \text{ m}$.

Now, compare:

- Emma: 2 000 m
- Liam: 3 000 m

Since 3 000 m is more than 2 000 m, Liam walks farther.