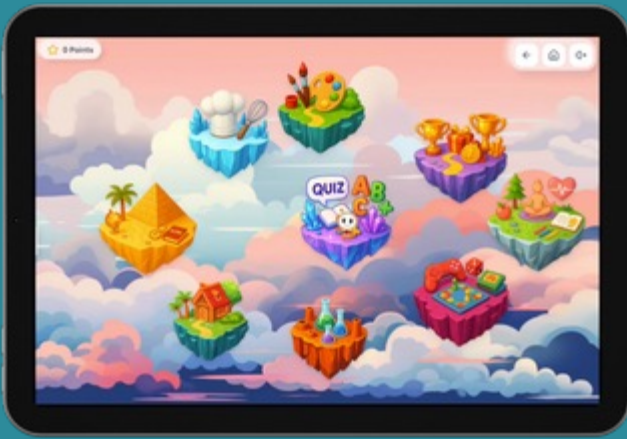


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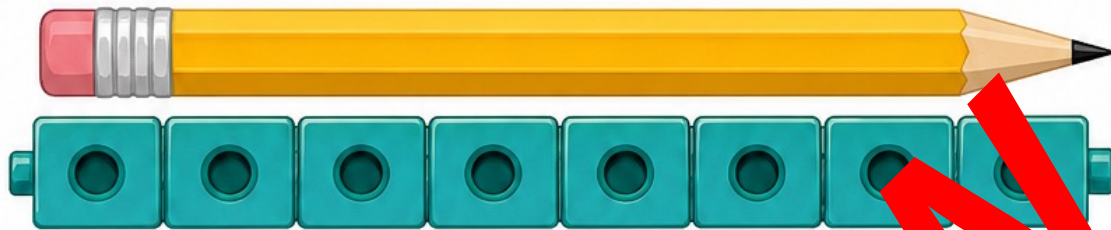


Measurement: Length – Year 2

Table of Contents	
Presentation: Measurement: Length	
Length Lab: Measure Fairly	
Length Toolkit	
Measure & Match Race	
Length Detective	
Estimate, Measure, Compare	
Same Unit, Fair Measure	
When Units Change	
Compare the Lengths	
Estimate, Measure, Reflect	
Length Reasoning Challenge	
Quiz: Measurement: Length	
Assessment: The Classroom Maker Bench	
Rubric: Measurement: Length Rubric	

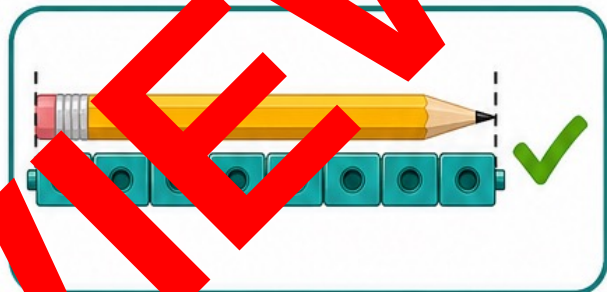


LENGTH LAB: MEASURE FAIRLY



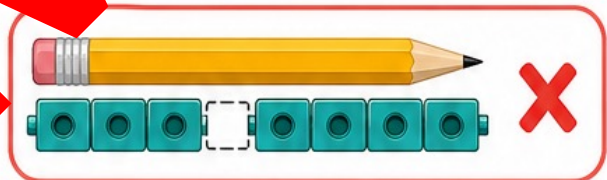
1 START TOGETHER

Line up the object and the first unit at the same starting point.



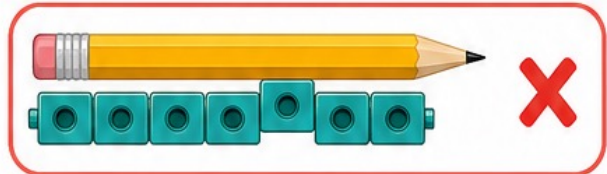
2 REPEAT ONE UNIT

Use the same-sized unit every time.



3 NO GAPS OR OVERLAPS.

Use the units end-to-end.



4 COUNT AND RECORD

The pencil is 8 cubes long.



COMPARE:

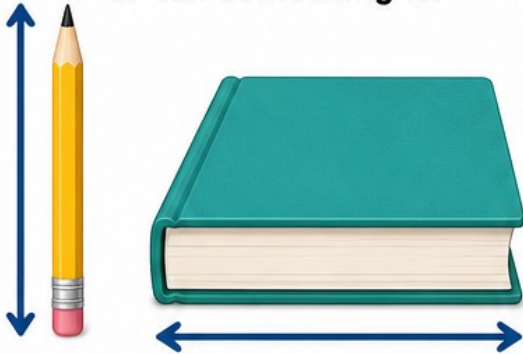
longer than • shorter than • the same length as



LENGTH TOOLKIT

LENGTH

Length tells us how long or tall something is.



MEASURE FAIRLY

- Start at the same point.
- Use the same-size unit.
- No gaps. No overlap.



UNITS WE CAN USE

cubes • paper clips • craft sticks



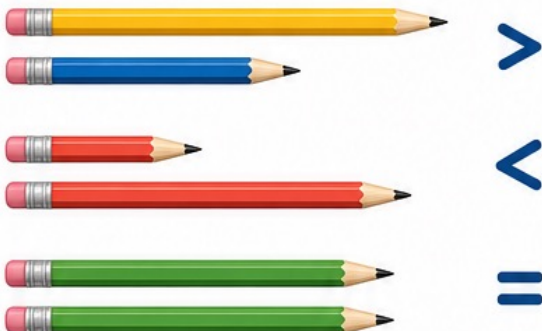
ESTIMATE

Make a smart guess before measuring.



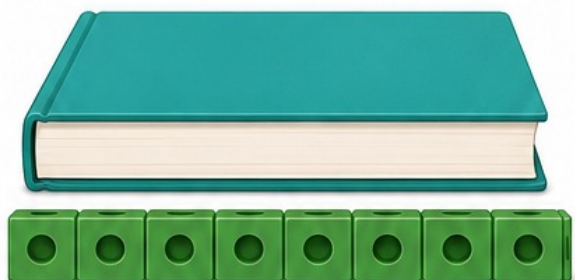
COMPARE

longer than • shorter than • the same length as



RECORD

The book is 8 cubes long.



MEASURE & MATCH RACE

TEACHER INSTRUCTIONS



GOAL

Measure a classroom object and find the card with the matching number.



PREPARE

Pairs • one board • one die • object cards • measurement cards • one form unit type



HOW TO PLAY

1. Roll the die and move.
2. Draw an Object Card.
3. Measure the object with the class unit.
4. Find the Measurement Card that matches your count.
5. Correct match: keep the card.
6. Incorrect match: return the card and stay in the space.



WIN

First to FINISH, or the player with the most cards when time is up.



MEASURE & MATCH RACE

STUDENT INSTRUCTIONS



1. Roll the die and move.
2. Draw an object Card.
3. Measure the object with the class unit.
4. Count every unit carefully.
5. Find the matching Measurement Card.
6. Keep the card if the match is correct.
7. Take turns and keep playing.

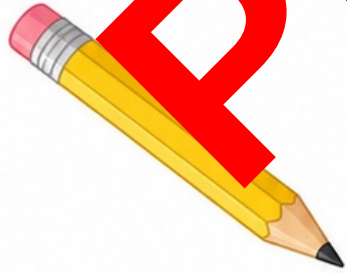


WIN

Reach FINISH first, or collect the most cards.







OBJECT CARD

Pencil



OBJECT CARD

Crayon



OBJECT CARD

Book



OBJECT CARD

Workbook



OBJECT CARD

Ruler



OBJECT CARD

Shoe



OBJECT CARD

Lunchbox



OBJECT CARD

**Whiteboard
Eraser**



OBJECT CARD

Glue Stick

PREVIEW

OBJECT CARD

Marker



OBJECT CARD

Paintbrush



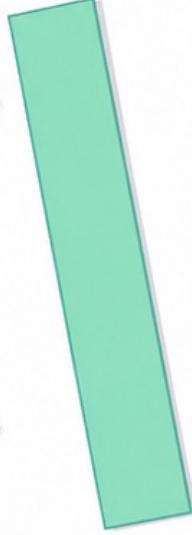
OBJECT CARD

Scissors



OBJECT CARD

Paper Strip



OBJECT CARD

Notebook



OBJECT CARD

Water Bottle



OBJECT CARD

Bag Strap



OBJECT CARD

Chair Seat



OBJECT CARD

Desk Edge



MEASUREMENT CARD

4
cubes

MEASUREMENT CARD

5
cubes

MEASUREMENT CARD

6
cubes

MEASUREMENT CARD

7
cubes

MEASUREMENT CARD

8
cubes

MEASUREMENT CARD

9
cubes

MEASUREMENT CARD

10
cubes

MEASUREMENT CARD

11
cubes

MEASUREMENT CARD

12
cubes

MEASUREMENT CARD

13
cubes

MEASUREMENT CARD

14
cubes

MEASUREMENT CARD

15
cubes

MEASUREMENT CARD

16
cubes

MEASUREMENT CARD

17
cubes

MEASUREMENT CARD

18
cubes

MEASUREMENT CARD

19
cubes

MEASUREMENT CARD

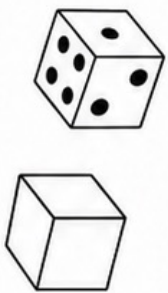
20
cubes

MEASUREMENT CARD

21
cubes

PREVIEW

MEASURE & MATCH RACE



RECORDING SHEET

Name: _____ Unit Used: _____

Round	Object	Measurement	Correct Match?	Card Kept?
1			Yes / No	Yes / No
2			Yes / No	Yes / No
3			Yes / No	Yes / No
4			Yes / No	Yes / No
5			Yes / No	Yes / No
6			Yes / No	Yes / No
7			Yes / No	Yes / No
8			Yes / No	Yes / No

LENGTH DETECTIVE

TEACHER INSTRUCTIONS



GOAL

Find a classroom object that matches the target length.



PREPARE

Small groups • Target cards • one uniform unit type • Recording sheets



HOW TO PLAY

1. Everyone uses the same unit.
2. Draw one Target Length card.
3. Estimate which object might match.
4. Measure the object carefully.
5. Exact match: record it and score 1 point.
6. No match: record the result and try a new object.



WIN

The detective with the most points after the final round wins.

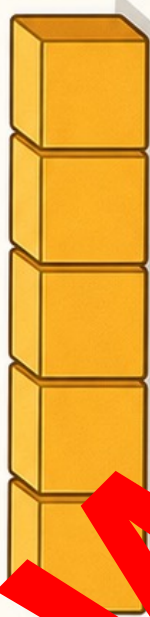


LENGTH DETECTIVE

STUDENT INSTRUCTIONS



1. Use the same measuring tool as everyone else.
2. Draw one Target Length Card.
3. Look for an object that might match.
4. Estimate before you measure.
5. Measure with no gaps or overlaps.
6. Record your result.
7. Score 1 point for an exact match.



Collect the most points.

TARGET LENGTH

4 units



TARGET LENGTH

5 units



TARGET LENGTH

6 units



TARGET LENGTH

7 units



TARGET LENGTH

8 units



TARGET LENGTH

9 units



TARGET LENGTH

10 units



TARGET LENGTH

11 units



TARGET LENGTH

12 units



PREVIEW

TARGET LENGTH

13 units



TARGET LENGTH

14 units



TARGET LENGTH

15 units



TARGET LENGTH

16 units



TARGET LENGTH

17 units



TARGET LENGTH

18 units



TARGET LENGTH

19 units



TARGET LENGTH

20 units



TARGET LENGTH

21 units



PREVIEW

Name: _____

Partner: _____



LENGTH DETECTIVE — RECORDING SHEET

Year 2 Mathematics

TARGET LENGTH	OBJECT FOUND	ESTIMATE	MEASURED LENGTH	DIFFERENCE	CHECK
1.					
2.					
3.					
4.					
5.					
6.					

Which target was easiest to match? Why?

How did using the same-sized unit make your measuring fair?



ESTIMATE, MEASURE, COMPARE

Teacher Instructions



Year 2 Length Game

GOAL

Practise estimating and measuring object lengths with one repeated informal unit, then compare results.



YOU NEED

object cards, identical counters or cubes, one recording sheet per pair, pencils.



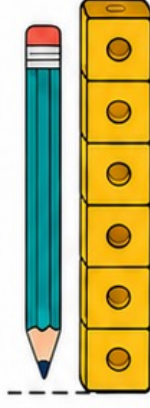
SET UP

Put object cards face down.
Give each pair 20 identical cubes or counters.



HOW TO PLAY

1. Draw an object card.
2. Estimate its length in units.
3. Build or find the object and measure from one end with equal units touching, no gaps or overlaps.
4. Record the estimate and measurement.
5. Calculate the difference.
6. Take turns for six rounds.



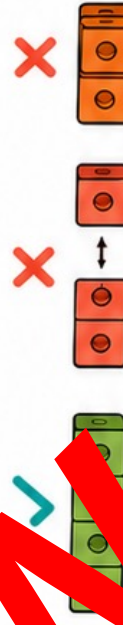
SCORING

Exact estimate: 3 points; 1 unit away = 2 points; 2 units away: 1 point; more than 2 units away: 0 points.



TEACHER CHECK

Ask: "Did you start at the same point?"
"Are all units the same size?"
"Are there gaps or overlaps?"

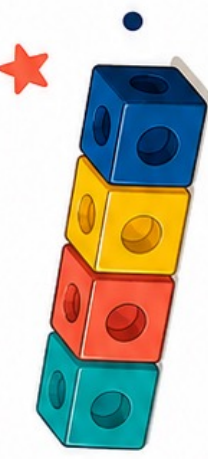


WIN

Highest score after six rounds; celebrate accurate measuring and thoughtful estimates.



ESTIMATE, MEASURE, COMPARE



How to Play and Score

1 PICK
an object
card.

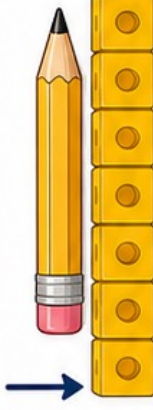


2 ESTIMATE
its length in
identical units.



3 MEASURE

from one end.
Units touch —
no gaps or
overlaps.



4 RECORD
your estimate
and measured
length.



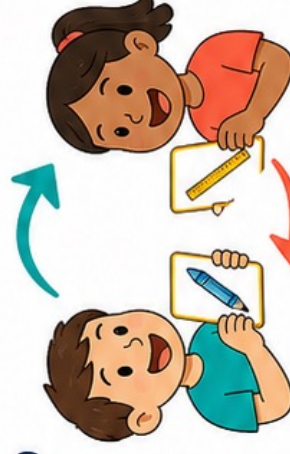
5 SCORE
the
difference.

Estimate
5 units

$|7 - 5| = 2$
2 away = 1 point

6 SWAP

turns and
play six
rounds.



SCORING

EXACT
= 3 points

1 AWAY
= 2 points

2 AWAY
= 1 point

**MORE THAN
2 AWAY**
= 0 points



Use the same-sized
unit every time.



ESTIMATE, MEASURE, COMPARE — OBJECT CARDS A



PENCIL



GLUE STICK



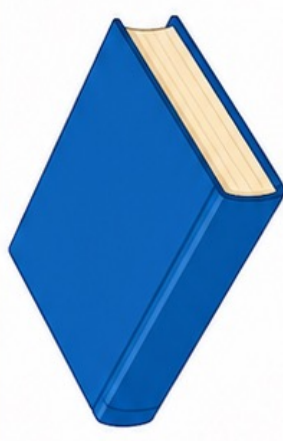
SPOON



PAINTBRUSH



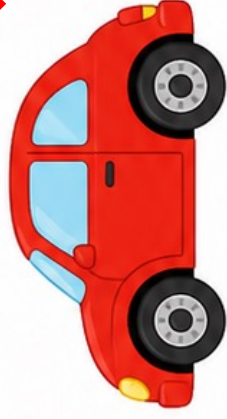
SCISSORS



BOOK



CRAYON



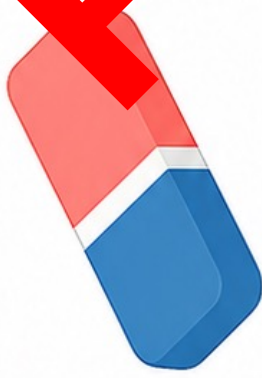
TOY CAR



WATER BOTTLE

PREVIEW

ESTIMATE, MEASURE, COMPARE – OBJECT CARDS B



ERASER



LUNCHBOX



SHOE



MARKER



PAINT TUBE



TOY BLOCK



HAIRBRUSH



FORK



NOTEBOOK

PREVIEW

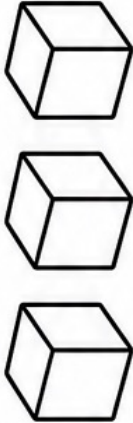
ESTIMATE, MEASURE, COMPARE – RECORDING SHEET

Year 2 Mathematics

Name: _____ Partner: _____

ROUND	OBJECT	ESTIMATE	MEASURED LENGTH	DIFFERENCE	POINTS
1					
2					
3					
4					
5					
6					

TOTAL SCORE: _____



Which estimate was closest? What helped you?

How did you check that your measurement was fair?

SAME UNIT, FAIR MEASURE

Page 1 — Measure with Cubes

Name: _____

Date: _____

Count the equal cube units. Write each length.



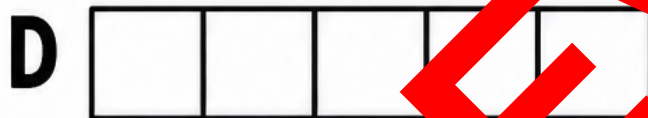
Length = _____ cubes



Length = _____ cubes



Length = _____ cubes



Length = _____ cubes



Length = _____ cubes



Length = _____ cubes

1. Which object is longest? _____

2. How many cubes longer is F than A? _____

SAME UNIT, FAIR MEASURE

Page 1 — Measure with Cubes

ANSWERS

Date: _____

Count the equal cube units. Write each length.



Length = 4 cubes



Length = 6 cubes



Length = 8 cubes



Length = 5 cubes



Length = 7 cubes



Length = 9 cubes

1. Which object is longest?

F

2. How many cubes longer is F than A?

5 cubes

SAME UNIT, FAIR MEASURE

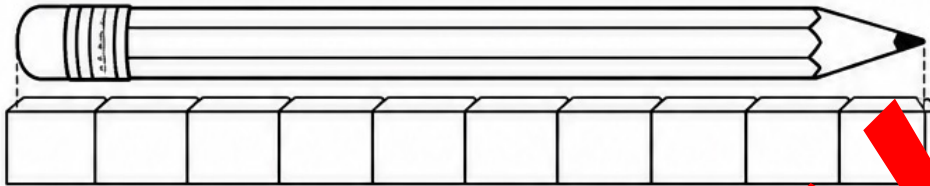
Page 2 — Fair or Unfair?

Name: _____

Date: _____

Look at each measurement. Circle FAIR or UNFAIR. Explain why.

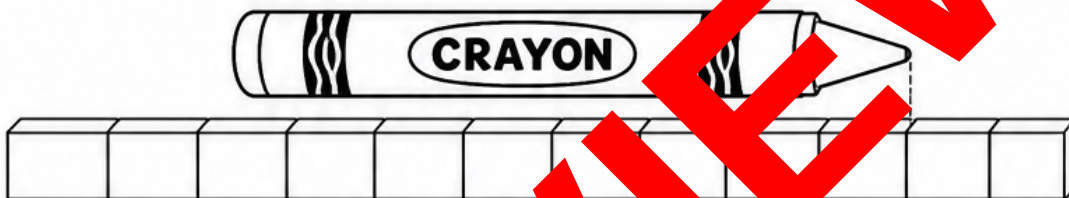
A



FAIR / UNFAIR

Explain why: _____

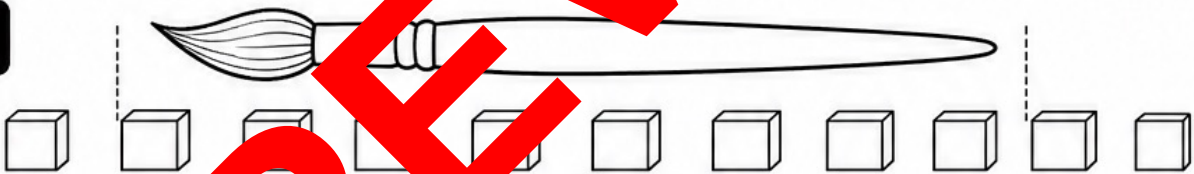
B



FAIR / UNFAIR

Explain why: _____

C



FAIR / UNFAIR

Explain why: _____

D



FAIR / UNFAIR

Explain why: _____

Challenge: Rewrite one unfair measurement rule so it becomes fair.

SAME UNIT, FAIR MEASURE

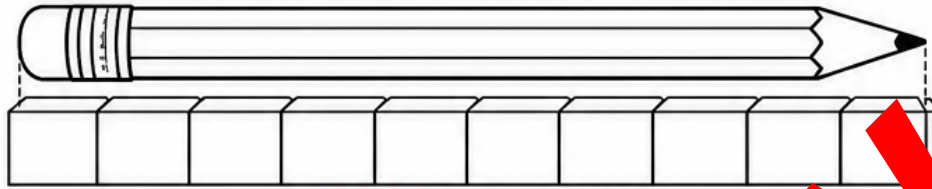
Page 2 — Fair or Unfair?

ANSWERS

Date: _____

Look at each measurement. Circle FAIR or UNFAIR. Explain why.

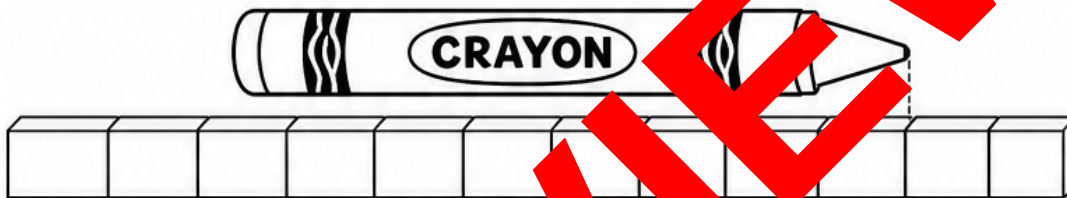
A



FAIR / UNFAIR

Explain why: Starts at the end; identical units touch.

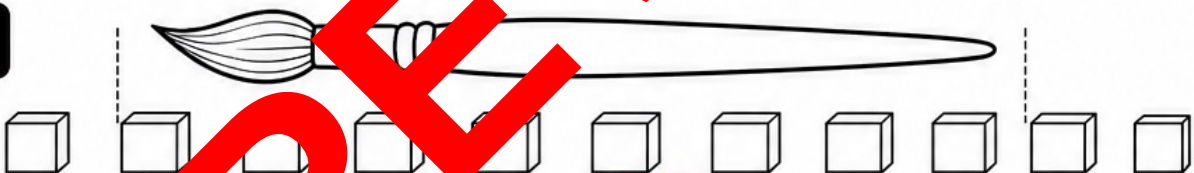
B



FAIR / **UNFAIR**

Explain why: The units start before the crayon.

C



FAIR / **UNFAIR**

Explain why: There are gaps between the units.

D



FAIR / **UNFAIR**

Explain why: The units are different sizes.

Challenge: Rewrite one unfair measurement rule so it becomes fair.

Start at one end. Use same-sized units touching, with no gaps or overlaps.

WHEN UNITS CHANGE

Page 1 — One Object, Two Units

Name: _____

Date: _____

The same object is measured twice. Count each row of units.

A RIBBON



--	--	--	--

--	--	--	--	--	--	--	--

Large units: _____

Small units: _____

B BOOK



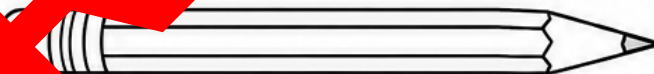
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--	--	--	--	--	--

Large units: _____

Small units: _____

C PENCIL



--	--	--	--	--

--	--	--	--	--	--	--	--

Large units: _____

Small units: _____

1. Which unit gives the larger number? _____

2. Why does the number change when the object stays the same?

WHEN UNITS CHANGE

Page 1 — One Object, Two Units

ANSWERS _____

Date: _____

The same object is measured twice. Count each row of units.

A RIBBON



--	--	--	--

Large units: 4

--	--	--	--	--	--	--	--

Small units: 8

B BOOK



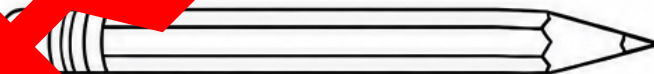
--	--	--

Large units: 3

--	--	--	--	--	--

Small units: 6

C PENCIL



--	--	--	--	--

Large units: 5

--	--	--	--	--	--	--	--	--	--

Small units: 10

1. Which unit gives the larger number? The small unit.

2. Why does the number change when the object stays the same?

Smaller units take more copies to cover the same length.

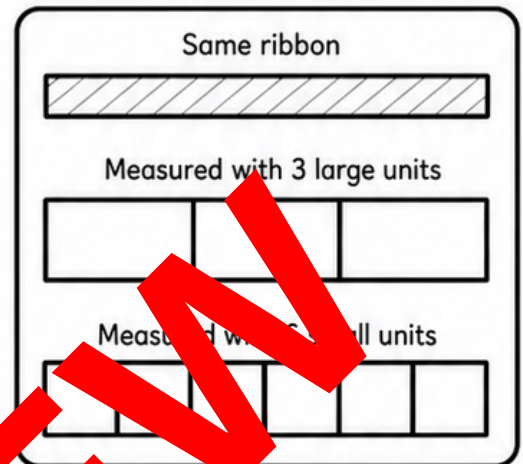
Name: _____

Date: _____

WHEN UNITS CHANGE

Page 2 — Explain the Change

1. Mia measured one ribbon with 6 craft sticks.
Leo measured the same ribbon with 12 cubes.
Why are their numbers different?



2. If you measure a desk with big blocks instead of small cubes, will you need more units or fewer units? Explain.

3. Sam says, 'A bigger measurement number always means a longer object.' Is Sam correct? Explain.

4. Complete: When the unit gets smaller, the number of units usually _____ because _____.

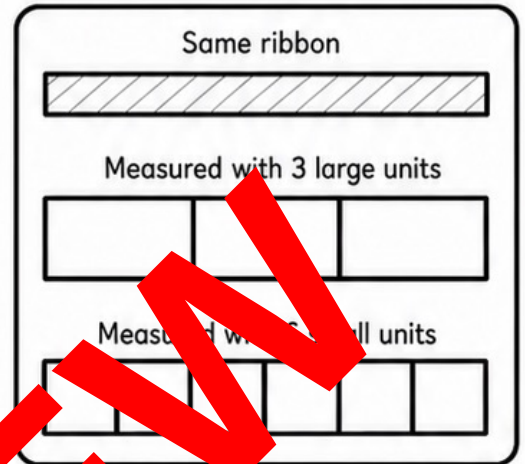
5. What must stay the same to compare two measured lengths fairly?

WHEN UNITS CHANGE

Page 2 — Explain the Change

1. Mia measured one ribbon with 6 craft sticks.
Leo measured the same ribbon with 12 cubes.
Why are their numbers different?

They used different-sized units. Cubes are smaller, so more are needed.



2. If you measure a desk with big blocks instead of small cubes, will you need more units or fewer units? Explain.

Fewer units. Each big block covers more of the desk.

3. Sam says, 'A bigger measurement number always means a longer object.' Is Sam correct? Explain.

No. Compare numbers when the same-sized unit is used.

4. Complete: When the unit gets smaller, the number of units usually increases because more small units fit along the same length.

5. What must stay the same to compare two measured lengths fairly?

Use the same-sized unit and the same fair measuring method.

COMPARE THE LENGTHS

Page 1 — Longer, Shorter or Equal

Name: _____

Date: _____

Write $>$, $<$ or $=$ in each box. All lengths use the same unit.



A.	7 units		4 units
B.	5 units		1 units
C.	6 units		6 units
D.	12 units		10 units
E.	3 units		8 units
F.	11 units		11 units
G.	4 units		9 units
H.	2 units		5 units

1. Write one pair that is equal. _____

2. Explain how you know 12 units is longer than 10 units.

COMPARE THE LENGTHS

Page 1 — Longer, Shorter or Equal

ANSWERS

Date: _____

Write $>$, $<$ or $=$ in each box. All lengths use the same unit.

$>$ $<$ $=$

A.	7 units	$>$	4 units
B.	5 units	$<$	1 units
C.	6 units	$=$	6 units
D.	12 units	$>$	10 units
E.	3 units	$<$	8 units
F.	11 units	$=$	11 units
G.	4 units	$>$	9 units
H.	2 units	$<$	5 units

1. Write one pair that is equal. **C and F.**

2. Explain how you know 12 units is longer than 10 units.

12 is 2 more than 10, using the same unit.

COMPARE THE LENGTHS

Page 2 — Order Three Lengths

Name: _____

Date: _____

Write each set from shortest to longest.

A. 4 units, 9 units, 6 units

Shortest _____ → _____ → _____ Longest

B. 12 units, 7 units, 10 units

Shortest _____ → _____ → _____ Longest

C. 5 units, 5 units, 8 units

Shortest _____ → _____ → _____ Longest

D. 3 units, 11 units, 6 units

Shortest _____ → _____ → _____ Longest

E. 14 units, 1 unit, 13 units

Shortest _____ → _____ → _____ Longest

F. 1 unit, 2 units, 7 units

Shortest _____ → _____ → _____ Longest

1. Which set contains equal lengths?

2. How can you check your order?

COMPARE THE LENGTHS

Page 2 — Order Three Lengths

ANSWERS

Date: _____

Write each set from shortest to longest.

A. 4 units, 9 units, 6 units

Shortest 4 units → 6 units → 9 units Longest

B. 12 units, 7 units, 10 units

Shortest 7 units → 10 units → 12 units Longest

C. 5 units, 5 units, 8 units

Shortest 5 units → 5 units → 8 units Longest

D. 3 units, 11 units, 6 units

Shortest 3 units → 6 units → 11 units Longest

E. 14 units, 11 units, 13 units

Shortest 11 units → 13 units → 14 units Longest

F. 8 units, 2 units, 7 units

Shortest 2 units → 7 units → 8 units Longest

1. Which set contains equal lengths?

Set C.

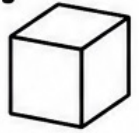
2. How can you check your order?

Check that each number stays the same or increases from left to right.



ESTIMATE, MEASURE, REFLECT

Student Measurement Record



Name: _____

Date: _____

Choose one kind of informal unit. Use that same-sized unit for every measurement.

My unit is: _____

OBJECT	ESTIMATE	MEASURED LENGTH	DIFFERENCE	POST-MEASURE CHECK
1.				☐
2.				☐
3.				☐
4.				☐
5.				☐

1. Which estimate was closest?

2. Which object was longest? How do you know?

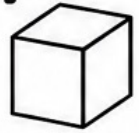
3. What did you do to measure fairly?

4. What would happen to the number if you used a smaller unit?



ESTIMATE, MEASURE, REFLECT

Student Measurement Record



ANSWERS

Date: _____

Choose one kind of informal unit. Use that same-sized unit for every measurement.

My unit is: _____

Answers vary — one same-sized unit must be used throughout.

OBJECT	ESTIMATE	MEASURED LENGTH	DIFFERENCE	POST-MEASURE CHECK
1.				☒
2.				☒
3.				☒
4.				☒
5.				☒

1. Which estimate was closest?

The row with the smallest difference.

2. Which object was longest? How do you know?

The object with the greatest measured number, because the unit stayed the same.

3. What did you do to measure fairly?

Started at one end; equal units touched with no gaps or overlaps.

4. What would happen to the number if you used a smaller unit?

The number usually increases because more small units fit.

Name: _____

Date: _____

LENGTH REASONING CHALLENGE

- 1** A red ribbon is 9 cubes long.
A blue ribbon is 6 cubes long.
How many cubes longer is the red ribbon?



- 2** A shelf is 12 blocks long.
A desk is 15 of the same blocks long.
How much longer is the desk?



- 3** Order these lengths from shortest to longest.
4 units, 10 units, 7 units.



- 4** The same box measures 5 large blocks
or 10 small cubes.
Why are the numbers different?



- 5** Tilly begins her cube row before the end of an object
and leaves gaps.
Name two changes that will make her measurement fair.



1. _____
2. _____



EXTENSION: Write one sentence using longer, shorter or equal.



LENGTH REASONING CHALLENGE

- 1** A red ribbon is 9 cubes long.
A blue ribbon is 6 cubes long.
How many cubes longer is the red ribbon?



3 cubes

- 2** A shelf is 12 blocks long.
A desk is 15 of the same blocks long.
How much longer is the desk?



3 blocks

- 3** Order these lengths from shortest to longest:
4 units, 10 units, 7 units.



4 units → 7 units → 10 units

- 4** The same book measures 5 large blocks
or 10 small cubes.
Why are the numbers different?



Small cubes cover less space, so more are needed for the same book.

- 5** Tilly begins her cube row before the end of an object
and leaves gaps.
Name two changes that will make her measurement fair.
1. Start the cubes at the object's end.
 2. Make the cubes touch with no gaps.



EXTENSION: Write one sentence using longer, shorter or equal.

9 units is longer than 6 units.



THE CLASSROOM MAKER BENCH

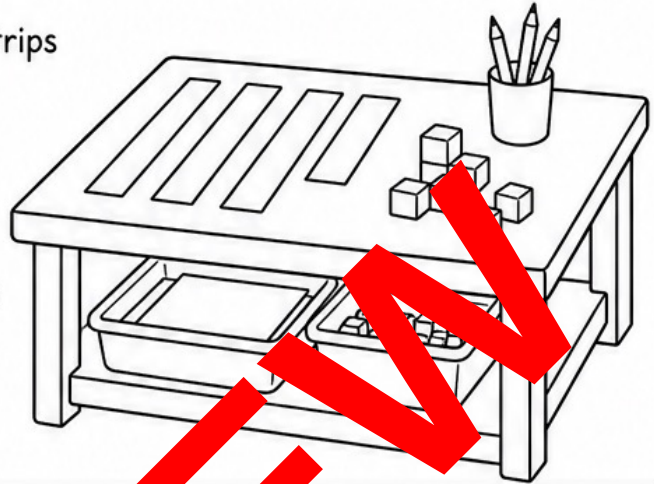
Assessment — Page 1: Estimate and Measure

Student: _____

Date: _____

Your teacher will give you four craft strips and one kind of informal unit.

1. Estimate each strip.
2. Measure from one end.
3. Use the same-sized unit with no gaps or overlaps.
4. Record your result.



Unit used: _____

STRIP	ESTIMATE	MEASURED LENGTH	DIFFERENCE	METHOD CHECK
STRIP A				☐
STRIP B				☐
STRIP C				☐
STRIP D				☐

1. Which strip was longest? Use your measurements as evidence.

2. Which estimate was closest?

3. Explain one rule for fair measuring.

THE CLASSROOM MAKER BENCH

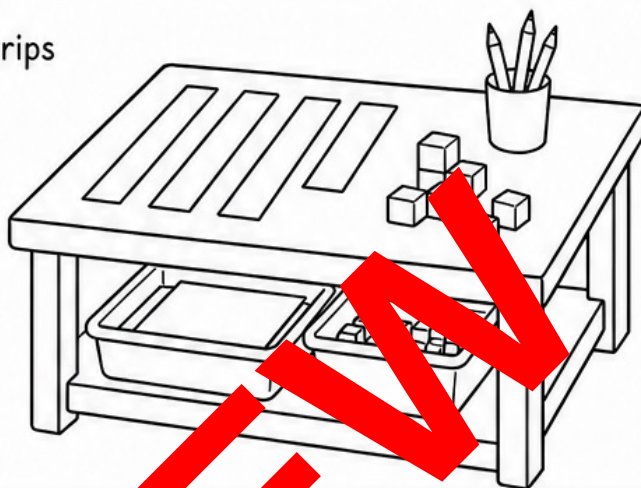
Assessment — Page 1: Estimate and Measure

MARKING GUIDE _____

Date: _____

Your teacher will give you four craft strips and one kind of informal unit.

1. Estimate each strip.
2. Measure from one end.
3. Use the same-sized unit with no gaps or overlaps.
4. Record your result.



Unit used: _____

any suitable repeated informal unit.

STRIP	ESTIMATE	MEASURED LENGTH	DIFFERENCE	METHOD CHECK
STRIP A	recorded first	accurate length	absolute difference	☒
STRIP B				☐
STRIP C				☐
STRIP D				☐

1. Which strip was longest? Use your measurements as evidence.

Answers that identifies the greatest measured number using the same unit.

2. Which estimate was closest?

The estimate with the smallest difference.

3. Explain one rule for fair measuring.

Start at one end; same-sized units touch with no gaps or overlaps.

Accept accurate results supported by the student's recorded measurements.

THE CLASSROOM MAKER BENCH

Assessment — Page 2: Compare and Explain

Student: _____

Date: _____

- 1 A table states:

RED STRIP	= 5 units
BLUE STRIP	= 8 units
GREEN STRIP	= 11 units

Order the strips from shortest to longest.

_____ → _____ → _____

- 2 How many units longer is the green strip than the red strip?
Show your thinking.

- 3 The diagram shows a craft strip that was measured unfairly.



Find two mistakes. Explain how to fix them.

1. _____

2. _____

- 4 Maya measured one strip as 7 craft sticks.
Leo measured the same strip as 14 cubes.
Leo says the strip grew.
Is Leo correct? Explain why the numbers can differ.

SELF-CHECK

☐ I used the same unit

☐ I compared the numbers

☐ I explained my thinking

THE CLASSROOM MAKER BENCH

Assessment — Page 2: Compare and Explain

ANSWERS

Date: _____

- 1 A table states:

RED STRIP	= 5 units
BLUE STRIP	= 8 units
GREEN STRIP	= 11 units

Order the strips from shortest to longest.

RED STRIP → BLUE STRIP → GREEN STRIP

- 2 How many units longer is the green strip than the red strip?
Show your thinking.

$11 - 5 = 6 \text{ units}$

- 3 The diagram shows a craft strip being measured unfairly.



Find two mistakes in how the strip is measured.

1. The cubes begin before the strip. Start at the left end.

2. There are gaps. Make every cube touch.

- 4 Maya measured one strip as 7 craft sticks.
Leo measured the same strip as 14 cubes.
Leo says the strip grew.

Is Leo correct? Explain why the numbers can differ.

No. The units are different sizes. Smaller cubes give a larger count;
the strip did not grow.

SELF-CHECK



I used the same unit



I compared the numbers



I explained my thinking

MEASUREMENT: LENGTH RUBRIC

Year 2 Mathematics

Student: _____ Date: _____ Task: _____

CRITERION	BEGINNING	DEVELOPING	ACHIEVING	CONFIDENT	EXCEEDING
ESTIMATE LENGTH	Gives a guess with support.	Gives a reasonable estimate.	Gives a reasonable estimate.	Explains an estimate.	Refines and justifies an estimate.
MEASURE FAIRLY	Needs help to align units.	Uses equal units with some errors.	Starts at one end; units touch.	Measures accurately with no gaps or overlaps.	Checks and corrects the method independently.
RECORD RESULTS	Records some information.	Records estimates or measures.	Records estimates and measures.	Records units and correct differences.	Records precise, organised evidence.
COMPARE LENGTHS	Compares with support.	Identifies longer or shorter.	Compares using the same unit.	Orders lengths and finds differences.	Explains and checks comparisons.
EXPLAIN UNIT SIZE	Notices counts can differ.	Links count to unit size.	Explains smaller units give a larger count.	Explains the idea to apply to new examples.	Generalises and critiques measurement choices.

Teacher comment: _____

Measurement: Length

Year 2 Mathematics



Measurement: Length

Length tells us how long or short an object is.
We can compare lengths by lining up one end.
We can measure length by repeating the unit.



Length Words We Use

LONGER — has more length

SHORTER — has less length

EQUAL — has the same length

Use the words to explain your comparison.



Fair Measurement Uses Uniform Units

Repeat the SAME-SIZED unit

Keep the unit choice the same when you compare objects.

A fair measurement can be checked and trusted.



Start at the Same Point

Line up the first unit with one end of the object.
Do not begin before or after the end.
A common start point makes comparisons fair.



Place Units End-to-End

Put each unit directly after the one before it.

Keep the row straight.

Continue until you reach the other end.



Avoid Gaps and Overlaps

A GAP misses part of the length.

An OVERLAP measures part of the length twice.

Units must touch — with no gaps or overlaps.



Count and Record the Unit

Count each repeated unit once.
Write the number AND the unit name.
Example: 8 cubes, not just 8.



Estimate Before Measuring

An estimate is a sensible prediction.

Think about a known object or unit.

Record your estimate before you measure.



Estimate, Measure, Compare

1. ESTIMATE the length.
2. MEASURE with one repeated unit.
3. COMPARE your estimate to result.
4. REFLECT: What helped you?



Compare Measured Length

When the SAME unit is used:

A greater number means longer length.

A smaller number means shorter length.

Equal numbers mean equal length.



What Happens When Units Change?

The object can stay the SAME length.

Smaller units usually give a LARGER count.

Larger units usually give a SMALLER count.

The number changes because the unit size changes.



Choose a Sensible Unit

For a pencil or book: cubes or paperclips can work.

For a desk or rug: hands, blocks, footsteps may work.

Choose a unit that is easy to repeat accurately.



Small and Large Objects

Small object + small unit = use in detail

Large object + larger unit = faster measuring

To compare fairly, keep the unit the same.



Measure Around the Classroom

Choose three safe classroom objects.

Estimate each length.

Measure with one meter stick.

Record, compare and order your results.



Explain Your Measurement

Try these sentence starters:

"I measured ____ using ____"

"It was ____ units long"

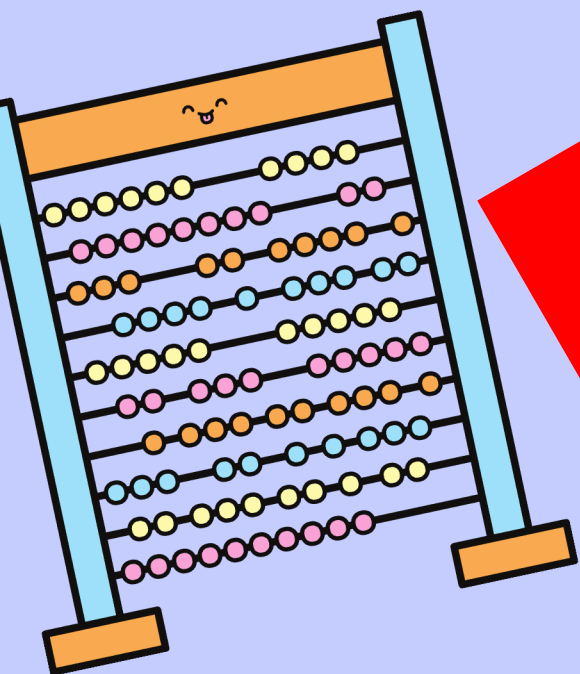
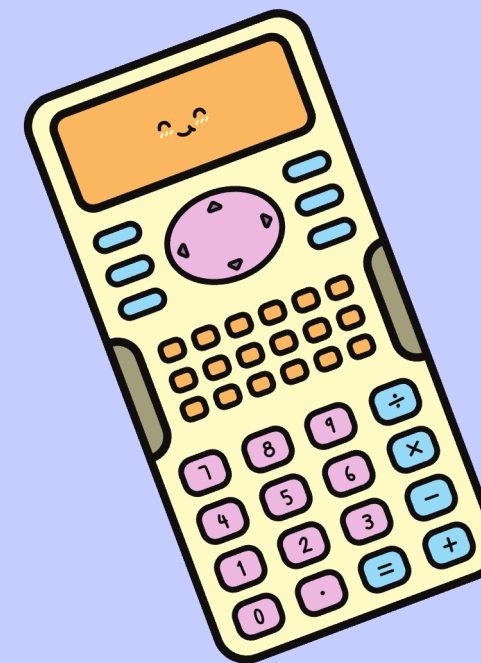
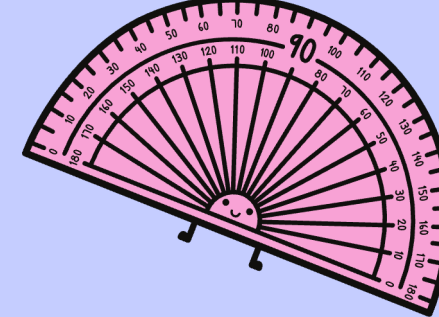
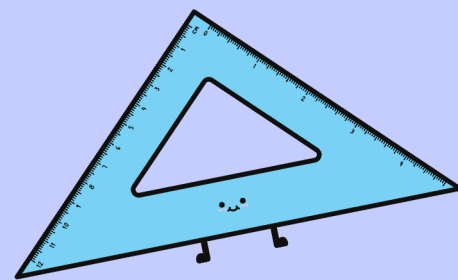
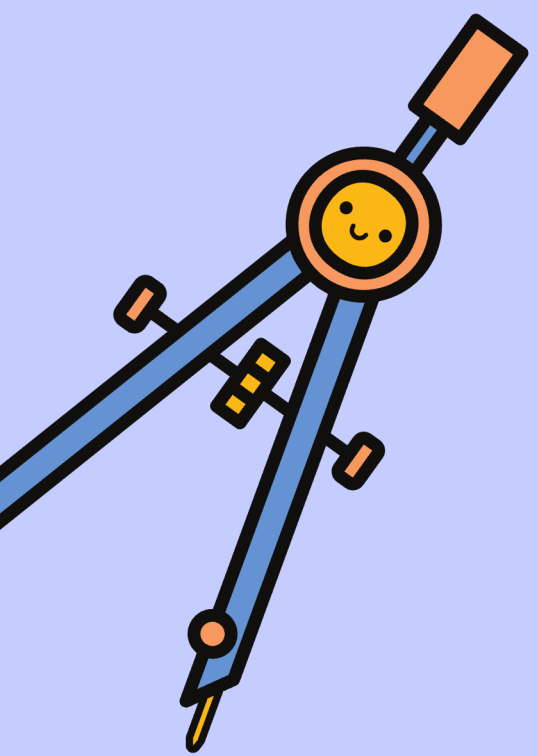
"My measurement was fair because ____"



This Week's Length Toolkit

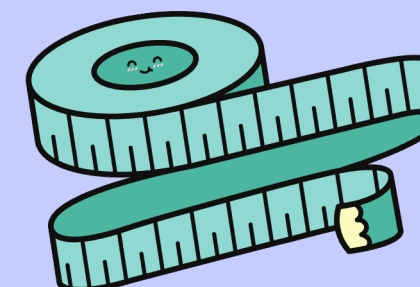
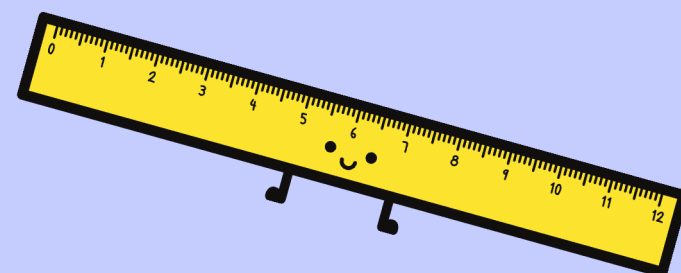
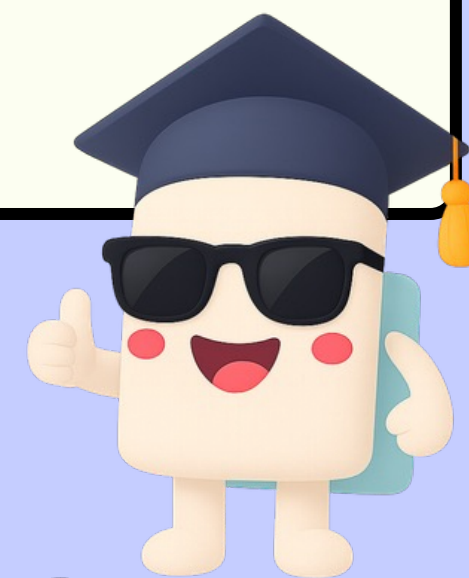
- ✓ Start at one end.
- ✓ Use same-sized units.
- ✓ Make units touch.
- ✓ Leave no gap or overlap.
- ✓ Record the number of units.

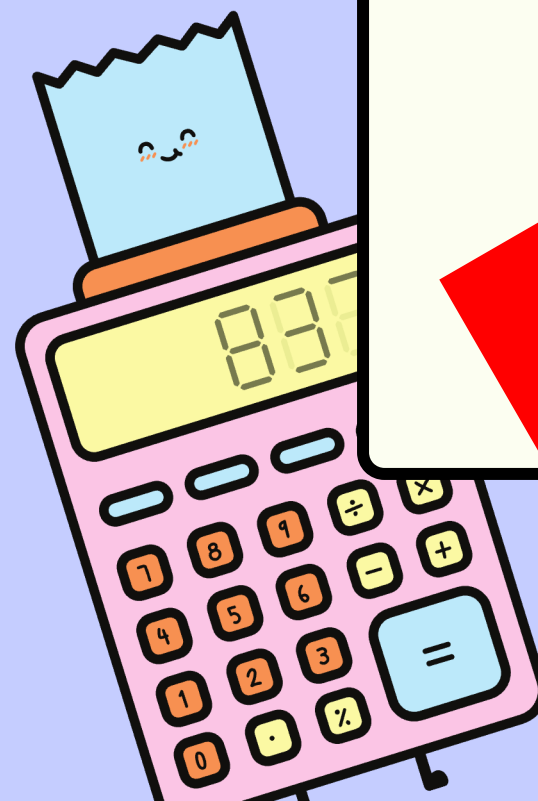
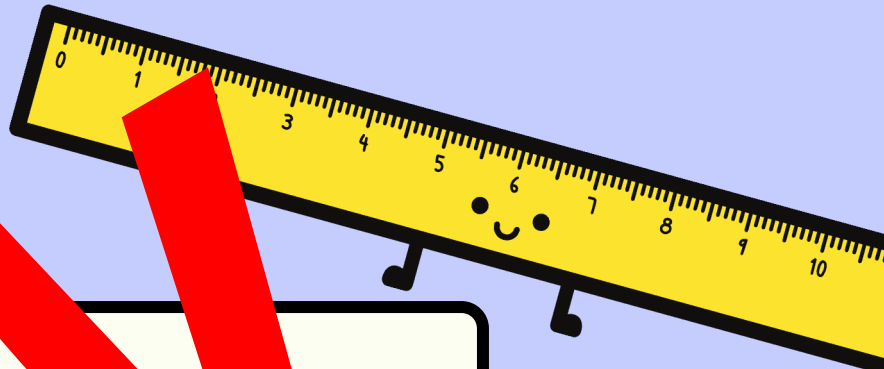
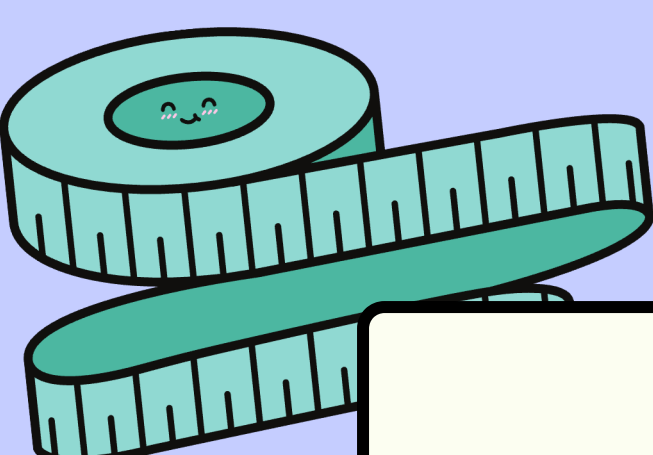




PREVIEW

Well Done!
You have measured fairly!





PREVIEW

Measurement: Length Quiz



Question 1 – Multiple Choice

What does LENGTH tell us about an object?

- A. How heavy it is
- B. How long or short it is
- C. How much it can hold



Answer 1

B. How long or short it is

Length describes the distance from one end of an object to the other.



Question 2 – True or False

A fair measurement repeats the same-size turn

TRUE or FALSE?



Answer 2

TRUE

Same-sized units make the count fair and trustworthy.



Question 3 – Short Answer

Name one informal unit you could use to measure a pencil.



Answer 3

Possible answers include:

- cubes
- paperclips
- counters

The units must all be the same size.



Question 4 – Multiple Choice

Which setup measures accurately?

- A. Units with gaps
- B. Same-sized units touching from one end
- C. A mixture of large and small units



Answer 4

B. Same-sized units touching from one end

This setup has a common starting point, uniform units and no gaps or overlaps.



Question 5 – True or False

Changing the size of the unit of measurement changes the measurement number.

TRUE or FALSE?



Answer 5

TRUE

Smaller units usually produce a larger count; larger units produce a smaller count.



Question 6 – Multiple Choice

What is an ESTIMATE?

- A. A sensible prediction before measuring
- B. The exact count after measuring
- C. A type of measuring unit



Answer 6

A. A sensible prediction before measuring

An estimate used when you already know to make a reasonable guess.



Question 7 – Short Answer

One object is 12 blocks long.

Another is 9 of the same blocks long.

Which is longer and by how many blocks?



Answer 7

The 12-block object is longer.

$$12 - 9 = 3$$

It is 3 blocks longer.



Question 8 – Multiple Choice

Which is a sensible informal unit for measuring a book?

- A. Paperclips or cubes
- B. Footsteps
- C. Car lengths



Answer 8

A. Paperclips or cubes

A smaller unit such as a smaller object can be repeated accurately.



Question 9 – True or False

Two different objects can have equal lengths.

TRUE or FALSE?



Answer 9

TRUE

Different objects can reach the same measured length when the same unit is used.



Question 10 – Short Answer

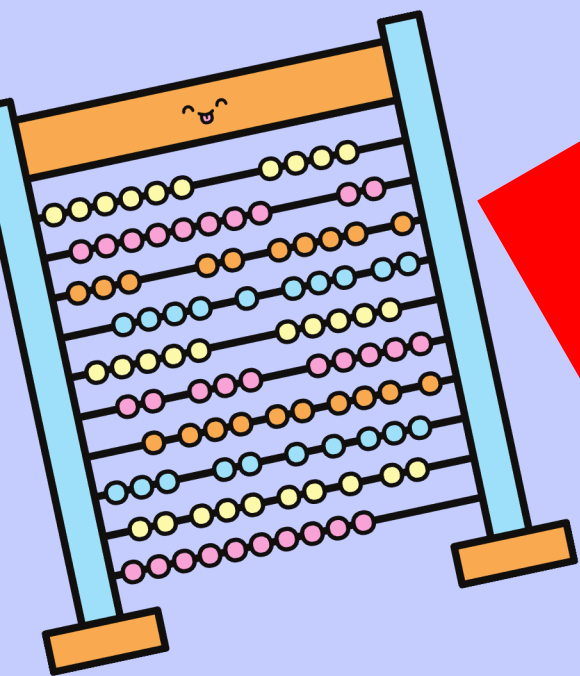
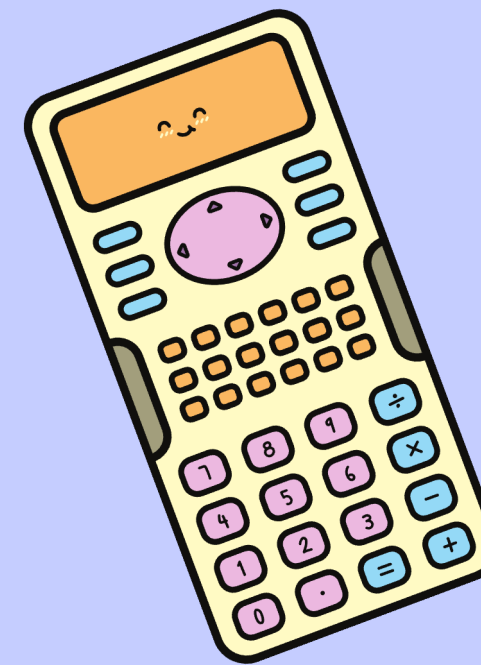
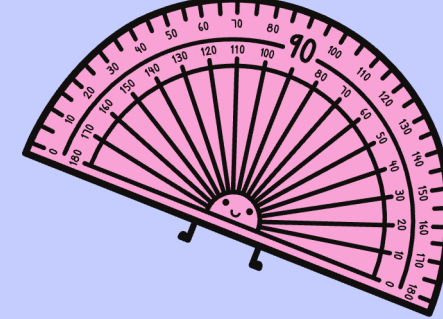
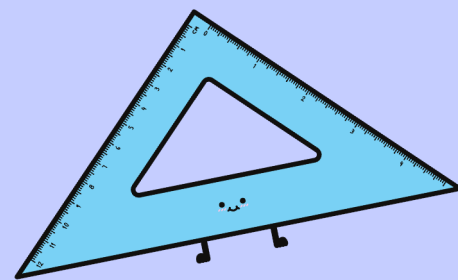
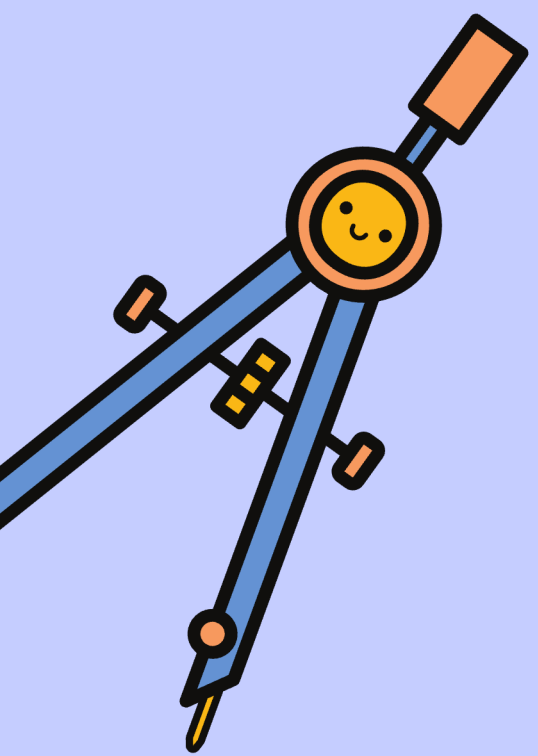
Why is it important to use the uniform unit when measuring and comparing length?



Answer 10

Uniform units keep every st the same size
That makes the me same f, accurate and easy to compare.





PREVIEW

Well done!
Quiz complete!

