



AIM: Today, you will learn how length is measured in the Metric System.

VOCABULARY

Meter-stick

meter

decimeter

centimeter

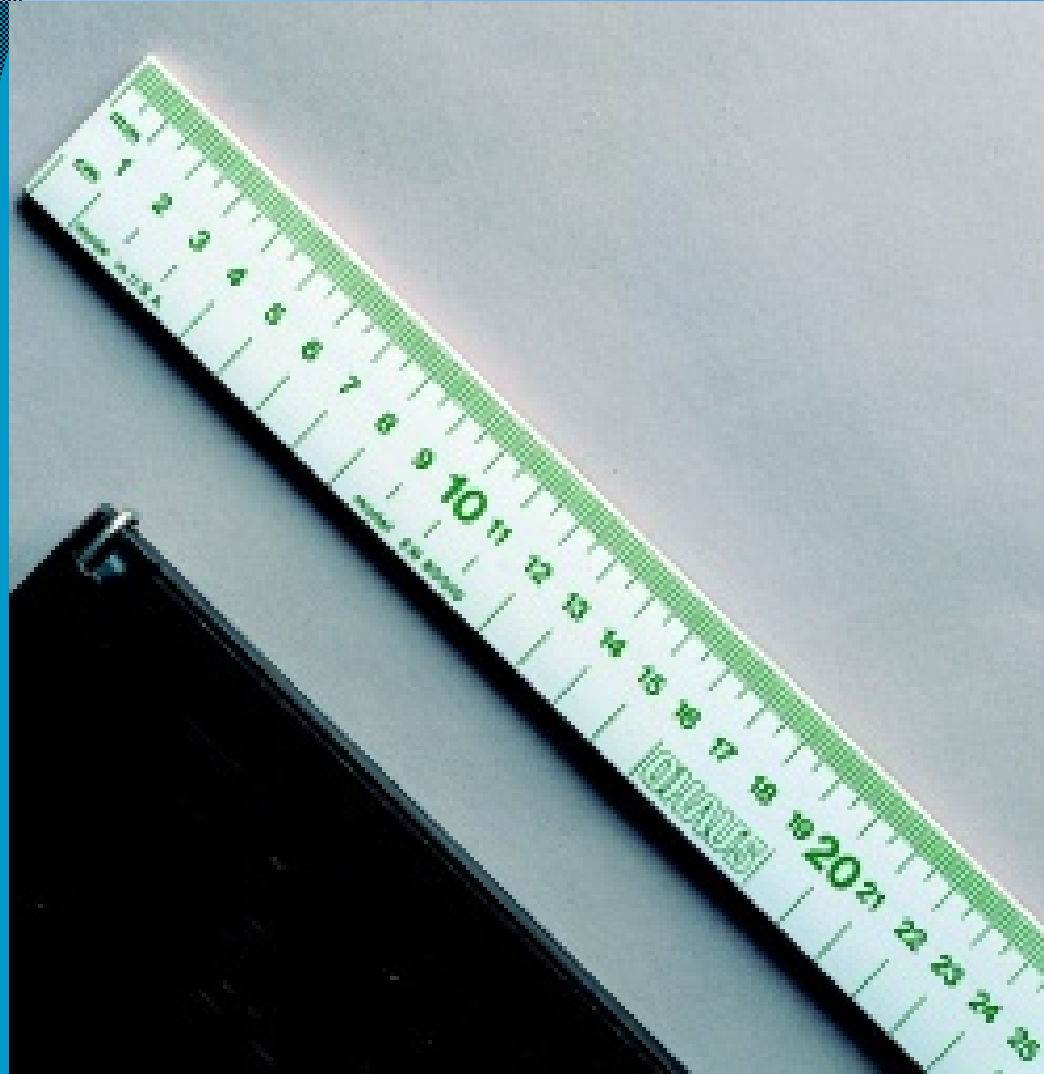
millimeter



OBJECTIVE

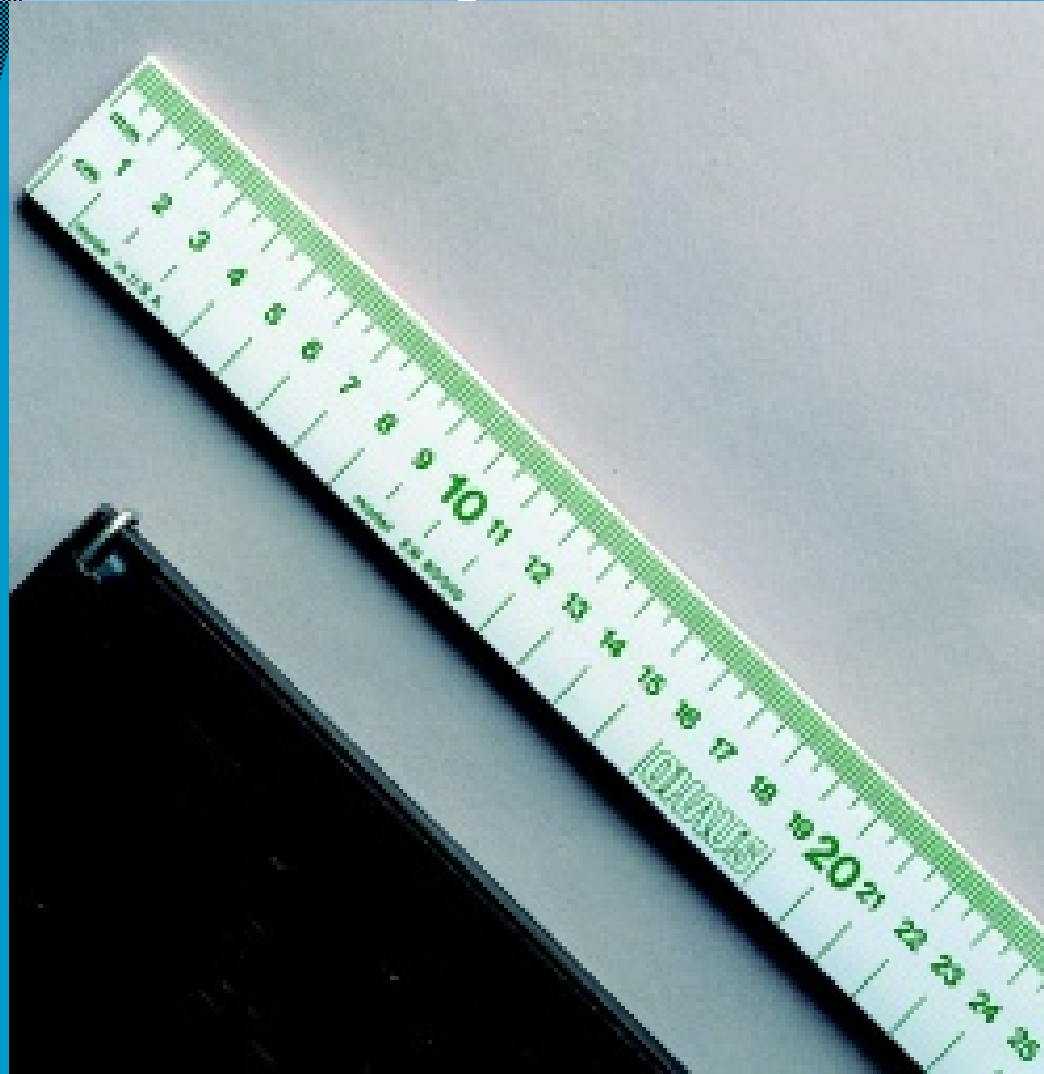
To understand and
successfully measure length
using the metric system

What is this called?



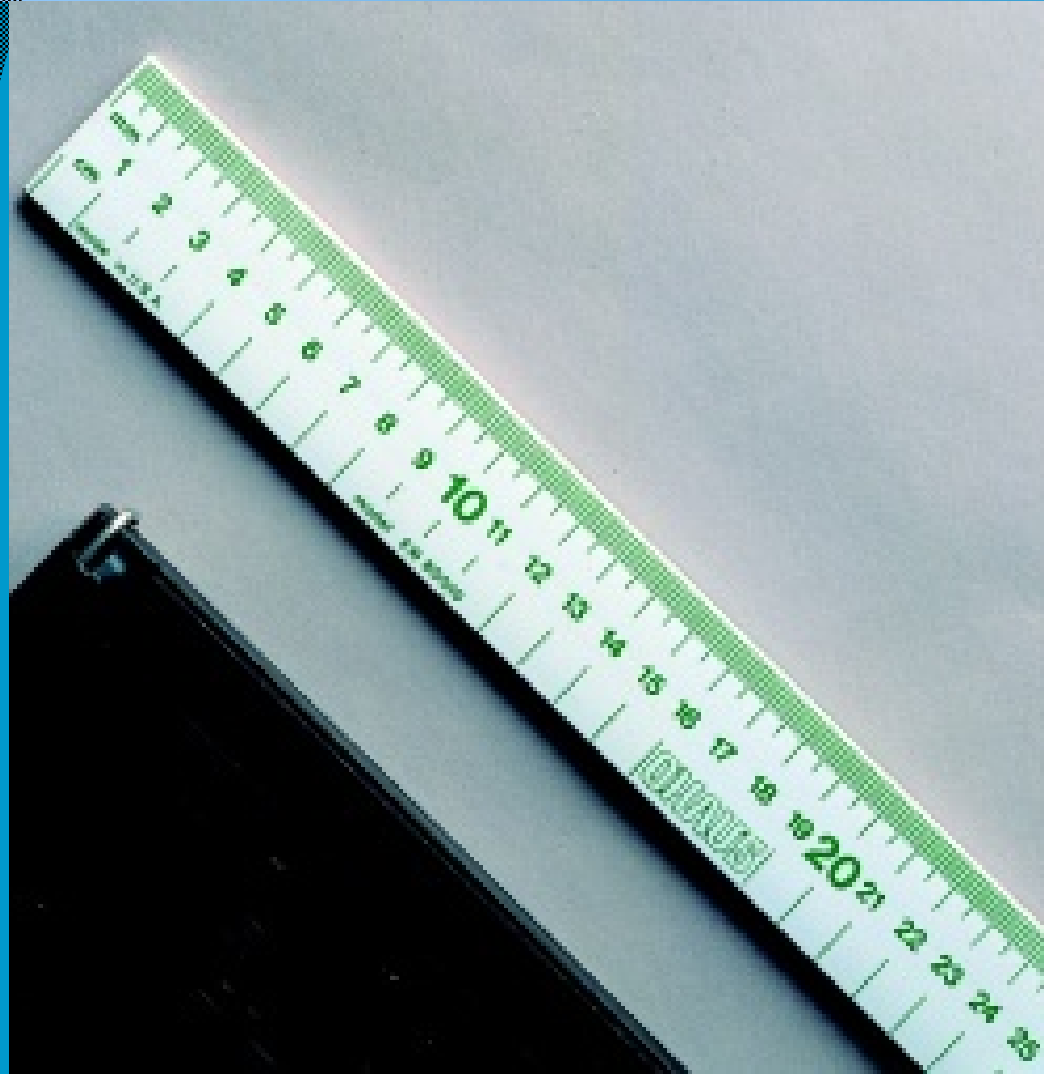
Meter
stick

The base (standard) unit of length in the metric system is called...?



The
METER
(m)

How many meters are there
on a meter stick?



1 meter

How many years are there in a decade?

What number is the decimal system based on ?

Sooooo.....How many decimeters do you think there are in a meter?

PROVE IT!!!!!!

**Everyone, now, COUNT
THE DECIMETERS ON
YOUR METER STICK !**

How many years are there in a century?

How many cents are there in a dollar?

How many legs does a centipede have?

Sooooo.....How many centimeters do you think there are in a meter?

PROVE IT!!!!!!

**Everyone, now, COUNT
THE CENTIMETERS ON
YOUR METER STICK !**

How many years are in a millenium?

How many legs does a millipede have?

So what do you think the prefix “milli” mean?

Sooooo.....How many millimeters do you think there are in a meter?

PROVE IT!!!!!!

Everyone, now, **COUNT**
THE MILLIMETERS ON
YOUR METER STICK !

Just kidding...

What does the word
abbreviation mean?

The abbreviation for meters is
“m”.

The abbreviation for
centimeters is “cm”.

The abbreviation for
millimeters is “mm”

Let's try some Metric
length conversions!

9/27/11

Math Problem

If $100 \text{ cm} = 1 \text{ m}$

Then how many $\text{cm} = 2 \text{ meters}$?

200 cm

How did you figure that?

Math Problem

If $100 \text{ cm} = 1 \text{ meter}$

Then how many $\text{cm} = 1.5 \text{ meters}$?

150 cm

How did you figure that?

Math Problem

If $1 \text{ m} = 100 \text{ cm}$

Then $300 \text{ cm} = \underline{\quad ? \quad} \text{ m}$

3

How did you figure that?

Math Problem

If $100 \text{ cm} = 1 \text{ m}$

Then $350 \text{ cm} = \underline{\quad ? \quad} \text{ m}$

3.5 m

How did you figure that?

Metric Rule

To convert meters to centimeters
MULTIPLY by 100...OR take 2
hops to the right on the step chart.

How do you think you convert
centimeters to meters?

DIVIDE by 100...OR take 2 hops
to the left on the step chart

Math Problem

If $1000 \text{ mm} = 1 \text{ meter}$

Then $2 \text{ meters} = \underline{\quad? \quad} \text{ mm}$

2000 mm

How did you figure that?

Math Problem

If $1000 \text{ mm} = 1 \text{ m}$

Then how many $\text{mm} = 1.5 \text{ meters}$

1,500

How did you figure that?

Math Problem

If $1,000 \text{ mm} = 1 \text{ m}$

Then $3000 \text{ mm} = \underline{\quad ? \quad} \text{ m}$

3.0 m

How did you figure that?

Math Problem

If $3,000 \text{ mm} = 3\text{m}$

Then $3,500 \text{ mm} = \underline{\quad? \quad} \text{ m}$

3.5 m

How did you figure that?

Metric Rule

To convert meters to millimeters
MULTIPLY by 1000...OR take 3
hops to the right on the step chart.

How do you think you convert
millimeters to meter?

DIVIDE by 1000... OR take 3
hops to the left on the step chart.

So there are 100 cm in a m.

And, there are 1000 mm in a m.

Use your metric rulers right now to **COUNT** how many mm there are in 1 cm.

Math Problem

If $1 \text{ cm} = 10 \text{ mm}$

Then how many $\text{mm} = 2 \text{ cm}$?

20 mm

How did you figure that?

Math Problem

If $1 \text{ cm} = 10 \text{ mm}$

Then $1.5 \text{ cm} = \underline{\quad? \quad} \text{ mm}$

15 mm

How did you figure that?

Metric Rule

To convert centimeters to millimeters

MULTIPLY by 10...OR take one hop to the right on the step chart

How do you think you convert millimeters to centimeter?

DIVIDE by 10... OR take one hop to the left on the step chart

Math Problem

If $10 \text{ mm} = 1 \text{ cm}$

Then $30 \text{ mm} = \underline{\quad ? \quad} \text{ cm}$

3

How did you figure that?

Math Problem

If $30 \text{ mm} = 3 \text{ cm}$

Then $35 \text{ mm} = \underline{\quad ? \quad} \text{ cm}$

3.5 cm

How did you figure that?

SUMMARY



The base (standard) unit of length in the metric system is the

_____?

m is the abbreviation for _____?

cm is the abbreviation for _____?

mm is the abbreviation for _____?



SUMMARY

1 meter = 1000 mm

1 meter = 100 cm

1 centimeter = 10 mm

You can use your metric conversion
shortcut:

K H D b d c m

To make it easier to convert between
units!