Maths Shed

Year 4

Spring Block 4: Decimals

Lesson 2: To be able to express tenths as decimals

Term: Spring **Unit:** Block 4 – Decimals **Lesson:** 2

To be able to express tenths as decimals

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Success criteria:

✓ I can use mathematical equipment and pictorial representations to express tenths as decimals

✓ I can explain my reasoning when using mathematical equipment and pictorial representations to express tenths as decimals
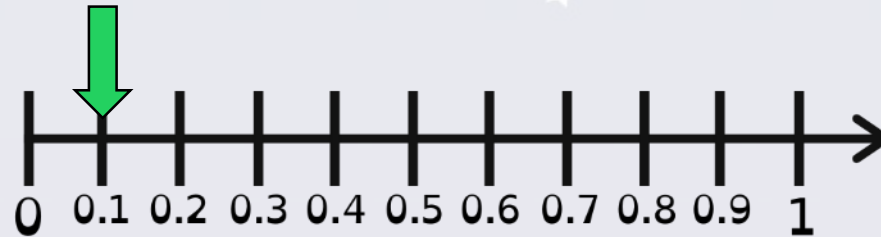
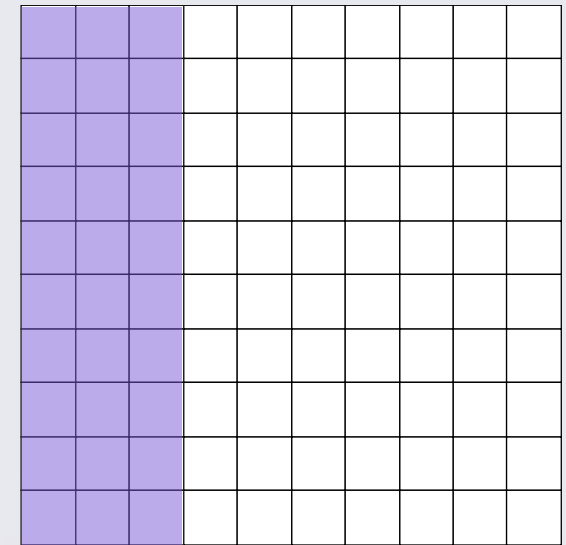# To be able to express tenths as decimals

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Starter:

Which one doesn't belong?

$\frac{1}{10}$

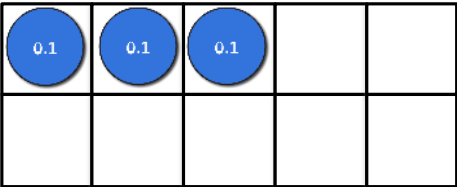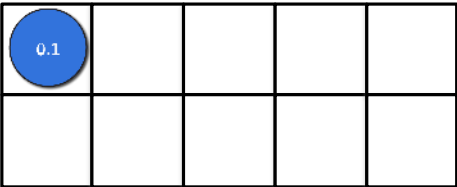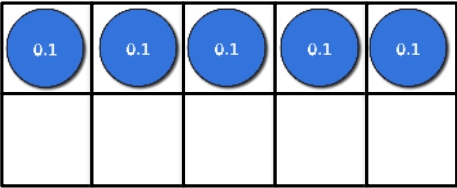0   0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9   1

0.1

The hundred square doesn't belong.
It is showing three tenths, the other representations each show one tenth.

To be able to express tenths as decimals

Talking Time:
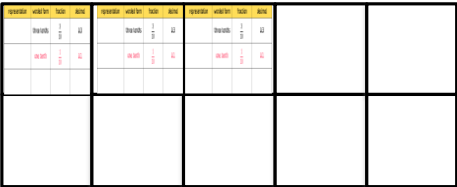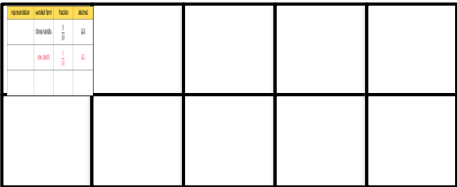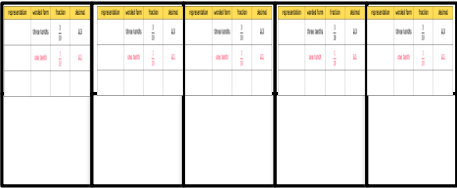
Complete the table below.

representation	worded form	fraction	decimal
0.1 0.1 0.1	three tenths	$\frac{3}{10}$	0.3
0.1			
0.1 0.1 0.1 0.1 0.1			

To be able to express tenths as decimals

Talking Time:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\dfrac{3}{10}$	0.3
	one tenth	$\dfrac{1}{10}$	0.1

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Talking Time:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\frac{3}{10}$	0.3
	one tenth	$\frac{1}{10}$	0.1
	five tenths	$\frac{5}{10}$	0.5

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Talking Time:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\dfrac{3}{10}$	0.3

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Talking Time:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\dfrac{3}{10}$	0.3
	two tenths	$\dfrac{2}{10}$	0.2

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Talking Time:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\dfrac{3}{10}$	0.3
	two tenths	$\dfrac{2}{10}$	0.2
	six tenths	$\dfrac{6}{10}$	0.6

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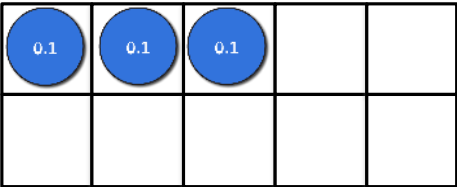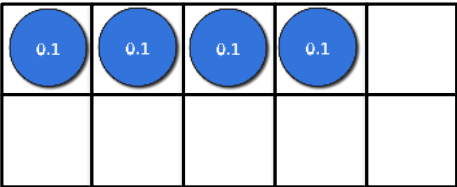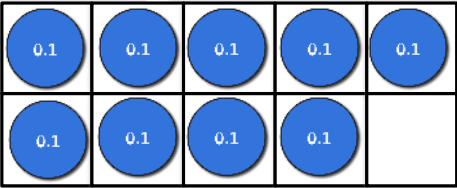
Activity 1:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\dfrac{3}{10}$	0.3
			0.9

To be able to express tenths as decimals

Activity 1:

Complete the table below.

representation	worded form	fraction	decimal
	three tenths	$\dfrac{3}{10}$	0.3
	four tenths	$\dfrac{4}{10}$	0.4
	nine tenths	$\dfrac{9}{10}$	0.9

To be able to express tenths as decimals

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Talking Time:

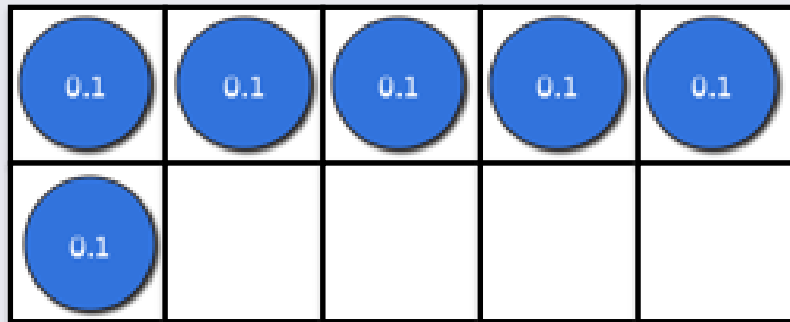Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

Talking Time:

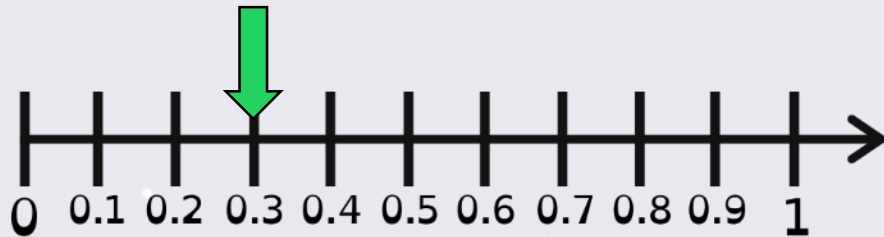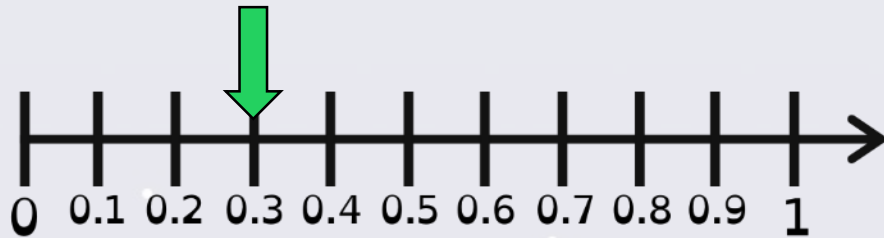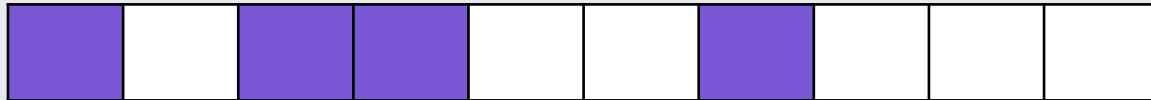Express the representation below as a fraction and as a decimal.
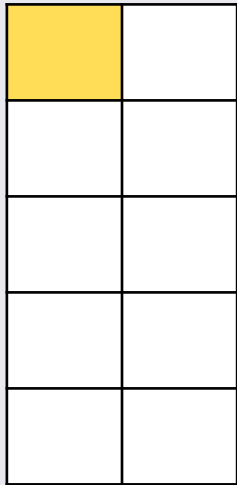

$$\frac{6}{10}$$

0.6

To be able to express tenths as decimals

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Talking Time:

Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

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Talking Time:

Express the representation below as a fraction and as a decimal.

$\frac{3}{10}$

0.3

To be able to express tenths as decimals

Talking Time:

Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

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Talking Time:

Express the representation below as a fraction and as a decimal.

$$\frac{5}{10}$$

0.5

To be able to express tenths as decimals

Talking Time:

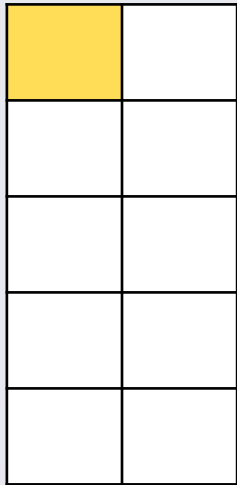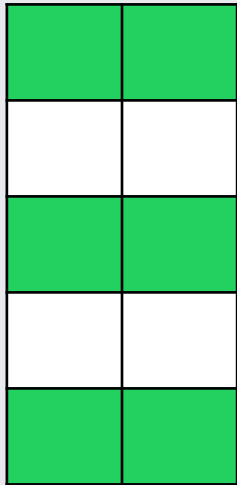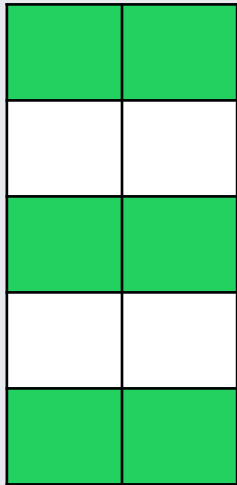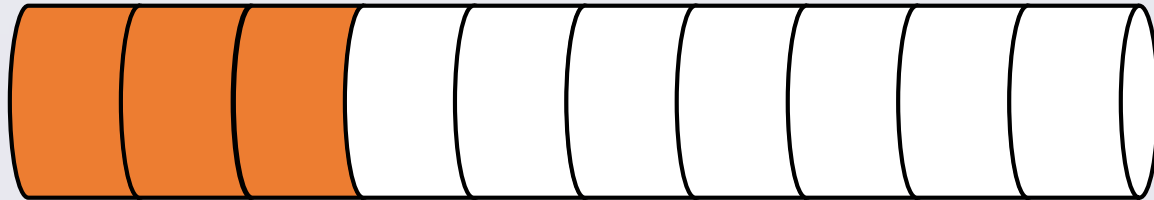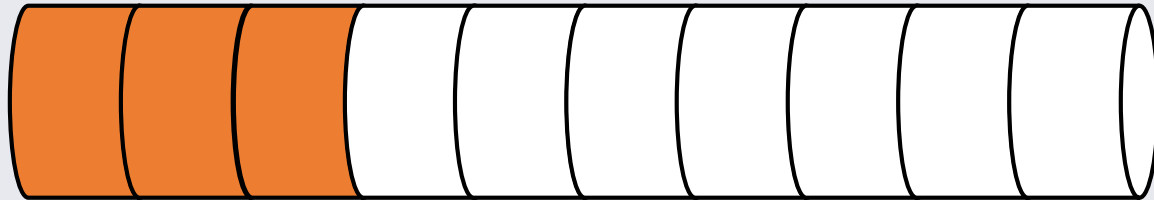Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

Talking Time:

Express the representation below as a fraction and as a decimal.

$$\frac{4}{10}$$

0.4

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Talking Time:

Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

Talking Time:

Express the representation below as a fraction and as a decimal.
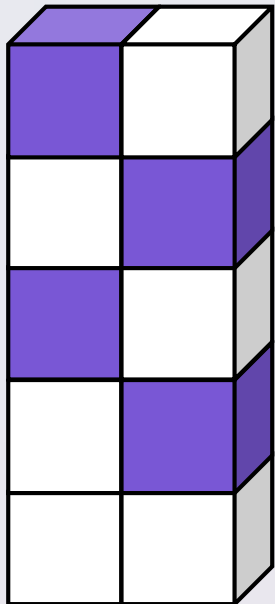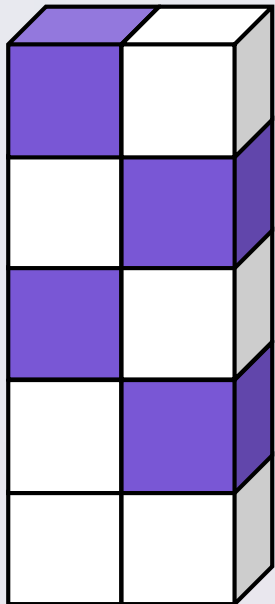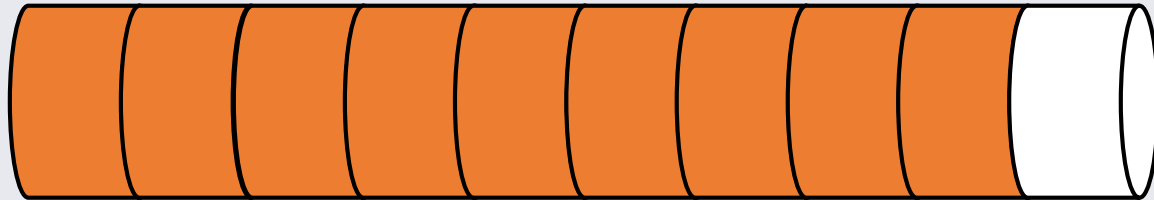
$$\frac{1}{10}$$

0.1

![Maths Shed logo]

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Talking Time:

Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

Talking Time:

Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

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Express the representation below as a fraction and as a decimal.

To be able to express tenths as decimals

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Talking Time:

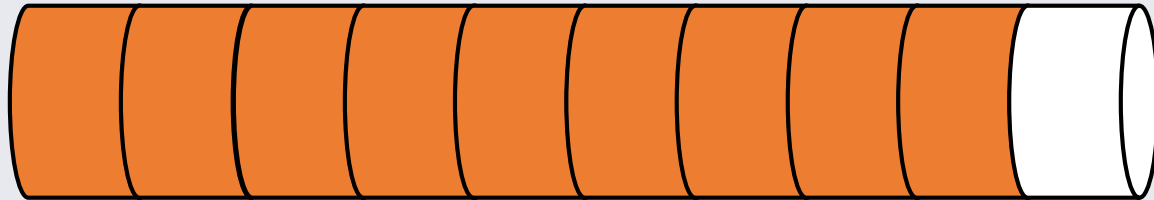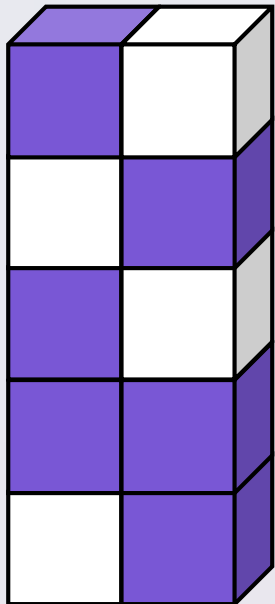Express the representation below as a fraction and as a decimal.
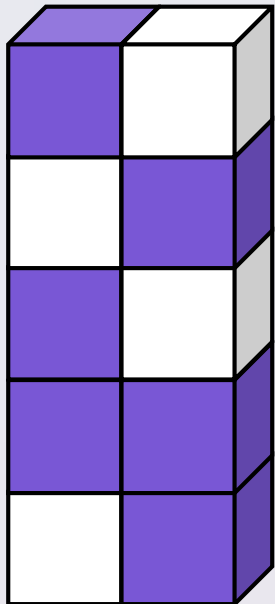
To be able to express tenths as decimals

Talking Time:

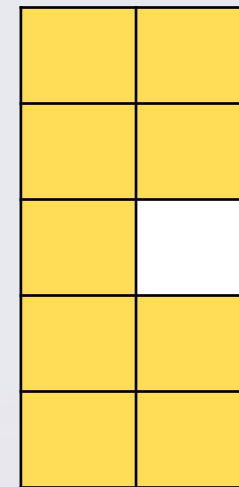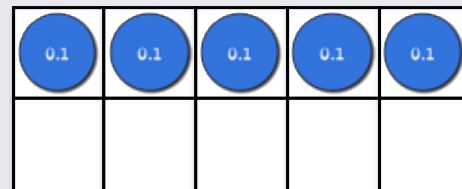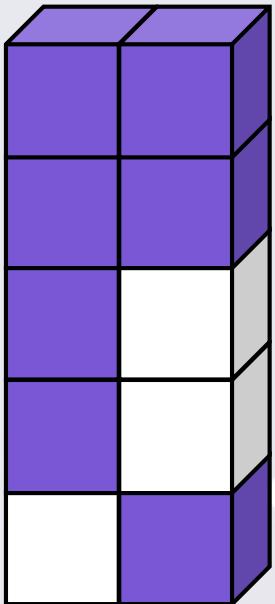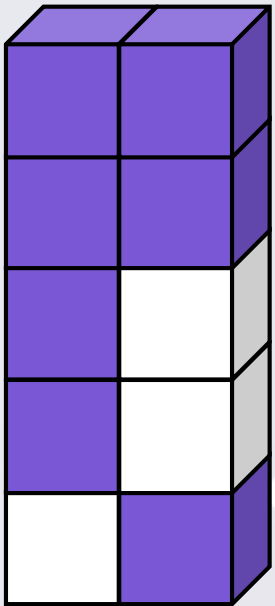Express the representation below as a fraction and as a decimal.

$$\frac{9}{10}$$

0.9

To be able to express tenths as decimals

Talking Time:

Express the representation below as a fraction and as a decimal.
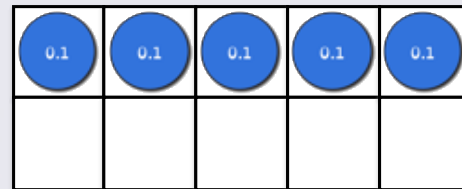
To be able to express tenths as decimals

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Activity 2:
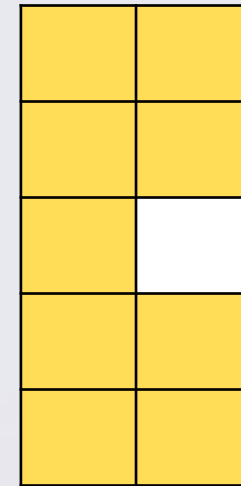
Express the representation below as a fraction and as a decimal.

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Activity 3:

What's the same? What's different?

Express the following in as many ways as you can...

$\dfrac{4}{10}$

0.8

0.6
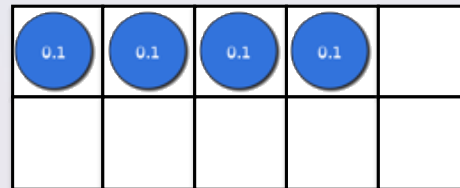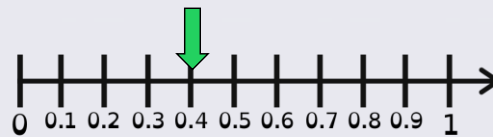
To be able to express tenths as decimals

Activity 3:

All even numbers. All one decimal place.

Examples provided.

six tenths

$\dfrac{8}{10}$

0.8

$\dfrac{4}{10}$

0.4

$\dfrac{6}{10}$

0.6

0   0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9   1

0.1 0.1 0.1 0.1

To be able to express tenths as decimals
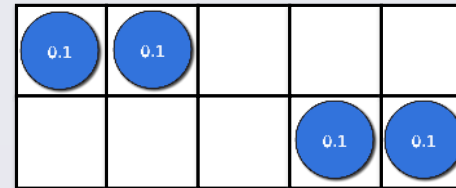
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Activity 4:

Which one doesn't belong?

The left-hand ten frame doesn't belong as it represents 0.5. Whereas the other ten frames all show 0.4 as there are four 0.1 counters in each.

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Activity 5:

Ahmed says, "I have five ones."

Ruth says, "I have fifty tenths."

James says, "Fifty is more than five, so Ruth has more than Ahmed."

Do you agree?

Explain your answer.

To be able to express tenths as decimals

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Activity 5:

Ahmed says, "I have five ones."

Ruth says, "I have fifty tenths."

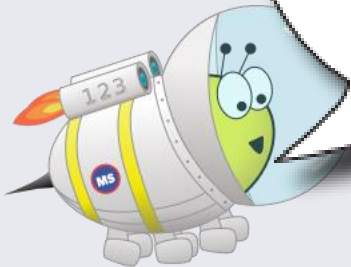James says, "Fifty is more than five, so Ruth has more than Ahmed."

No, I do not agree. Fifty tenths is the same as five ones, because there are ten tenths in one. Therefore, James is wrong as they have the same amount.

To be able to express tenths as decimals
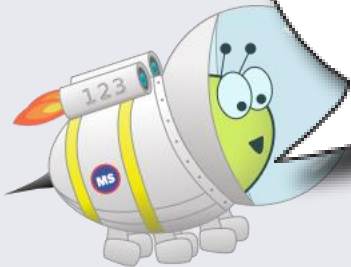
Evaluation:

1.3 is the same as thirteen tenths.

Yes, Astrobee is correct.
1.3 is the same as thirteen tenths, it is also the same as one and three tenths.

To be able to express tenths as decimals

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Success criteria:

- ✓ I can use mathematical equipment and pictorial representations to express tenths as decimals

- ✓ I can explain my reasoning when using mathematical equipment and pictorial representations to express tenths as decimals