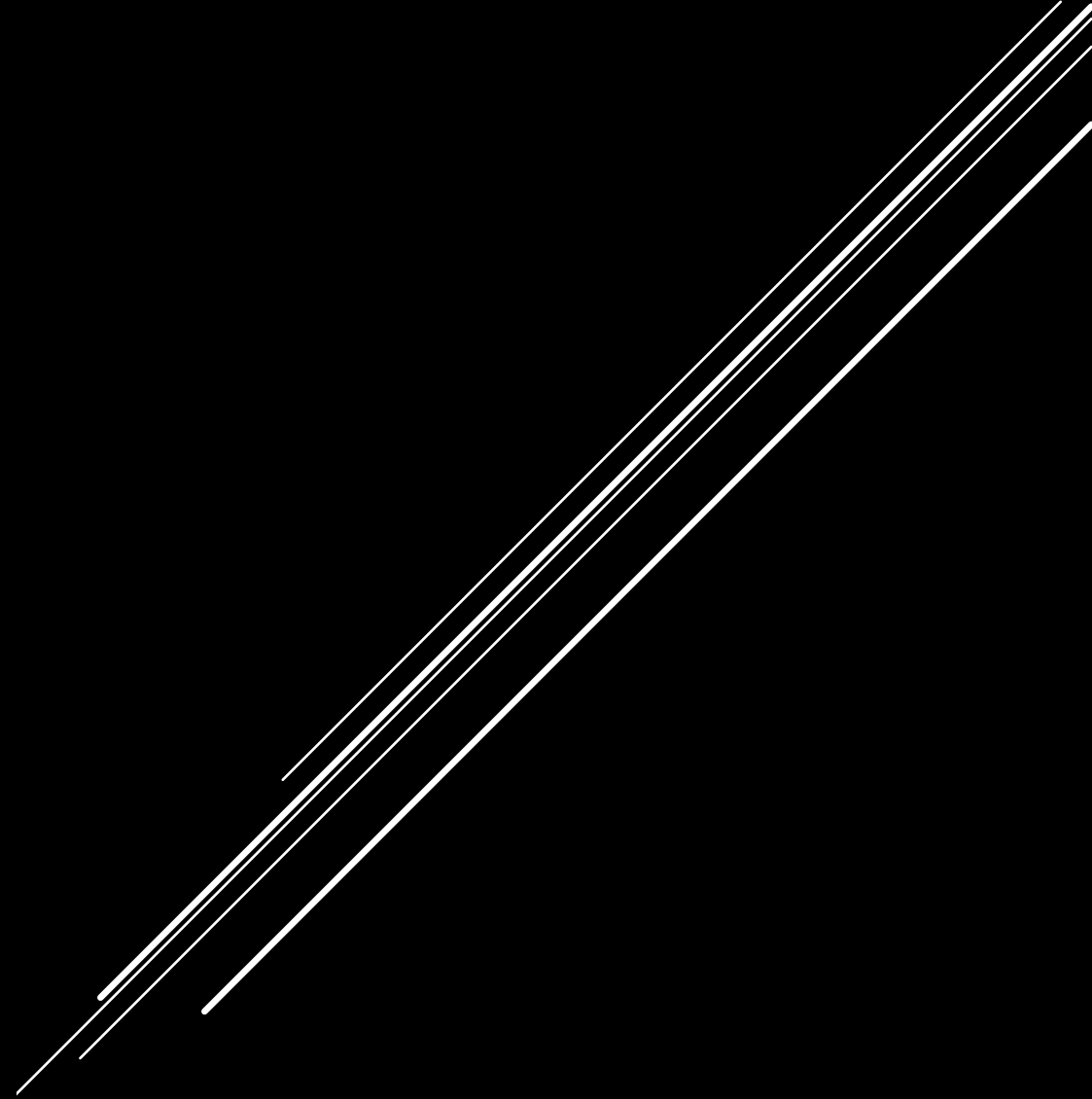


YEAR 6 MATHS

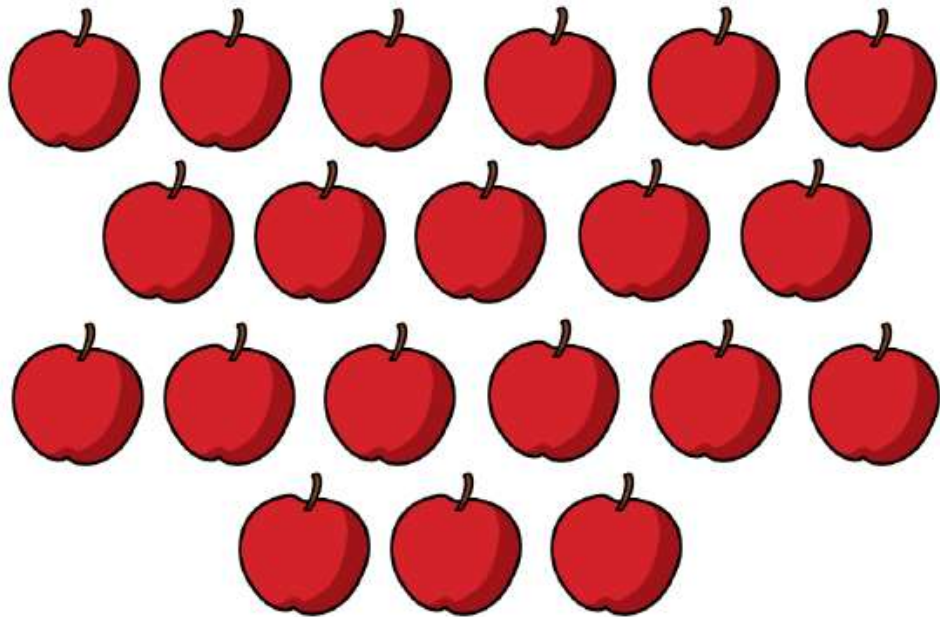
WEEK 14 LESSON 2

Decimals



PROBLEM STARTER

- 1** Lily has 20 apples.



She packs the apples into bags of 4

How many bags does she need?

- 2** $\frac{3}{8}$ of people watching a play are adults.

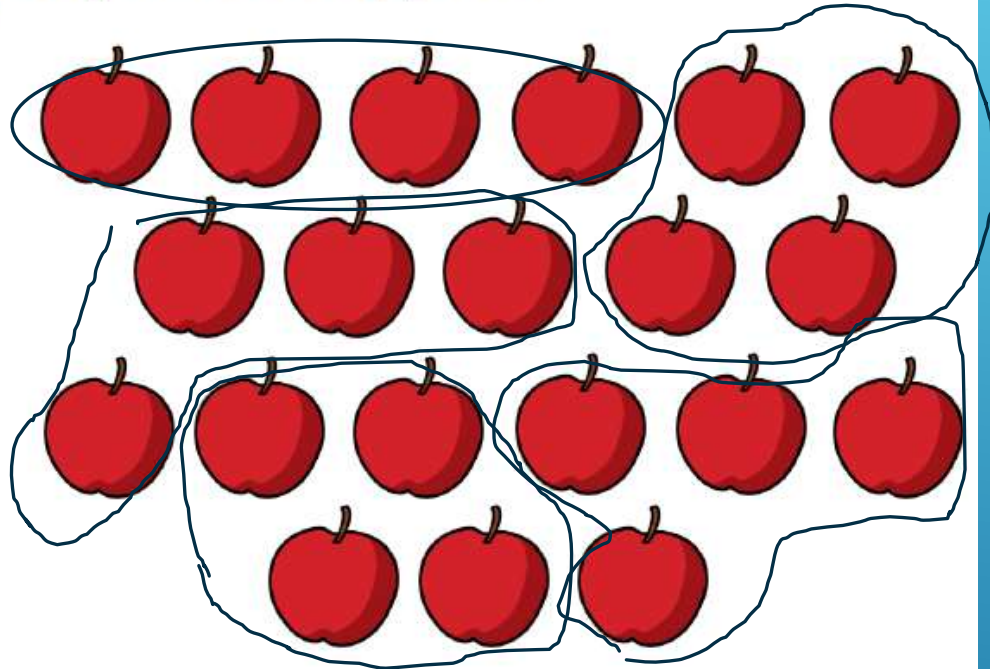
The rest of the people watching are children.

There are 32 more children than adults watching the play.

How many people are watching the play in total?

ANSWERS

1 Lily has 20 apples.



**She packs the apples into bags
of 4**

**How many bags does she need?
Lily needs 5 bags of apples.**

20 divided by 4 is 5.

We can see this
when we group the
apples into 4s we
have 5 bags.

ANSWERS

2 $\frac{3}{8}$ of people watching a play are adults.

The rest of the people watching are children.

There are 32 more children than adults watching the play.

How many people are watching the play in total?

128 people are watching the play in total.

$\frac{3}{8}$ of the people are adults.

The rest ($\frac{5}{8}$) are children.

Children represent $\frac{2}{8}$ more of the people than the adults. There are 32 more children than adults. So $\frac{2}{8}$ of the people is equal to 32.

So $\frac{8}{8}$ is $32 \times 4 = 128$

Introduction

Which column titles belong in the place value chart below?

Ones

Thousandths

Tens

Hundredths

Thousands

Tenths

Introduction

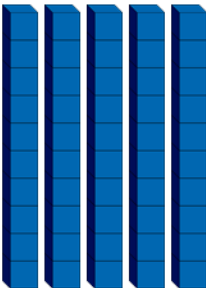
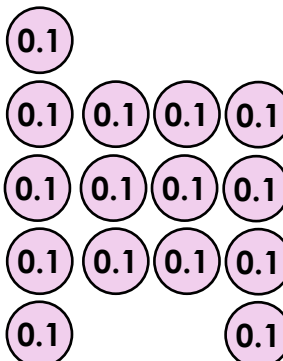
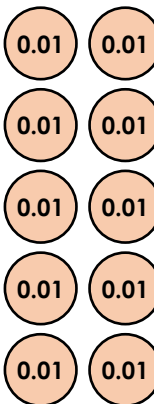

Which column titles belong in the place value chart below?

Ones	Thousandths	Tens
Hundredths	Thousands	Tenths

Tens	Ones	Tenths	Hundredths	Thousandths

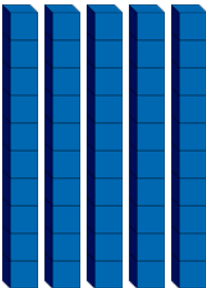
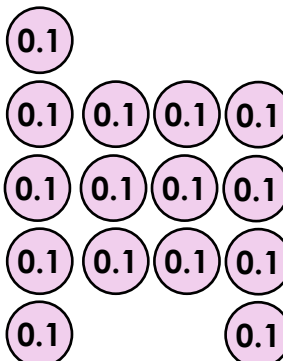
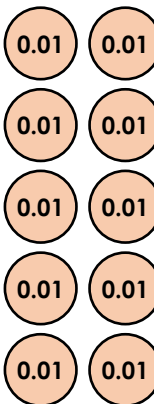

Class Question 1

Convert the number in the place value chart to digits.

Tens	Ones	Tenths	Hundredths	Thousandths
				

Class Question 1

Convert the number in the place value chart to digits.

Tens	Ones	Tenths	Hundredths	Thousandths
				
5	1	6	0	3

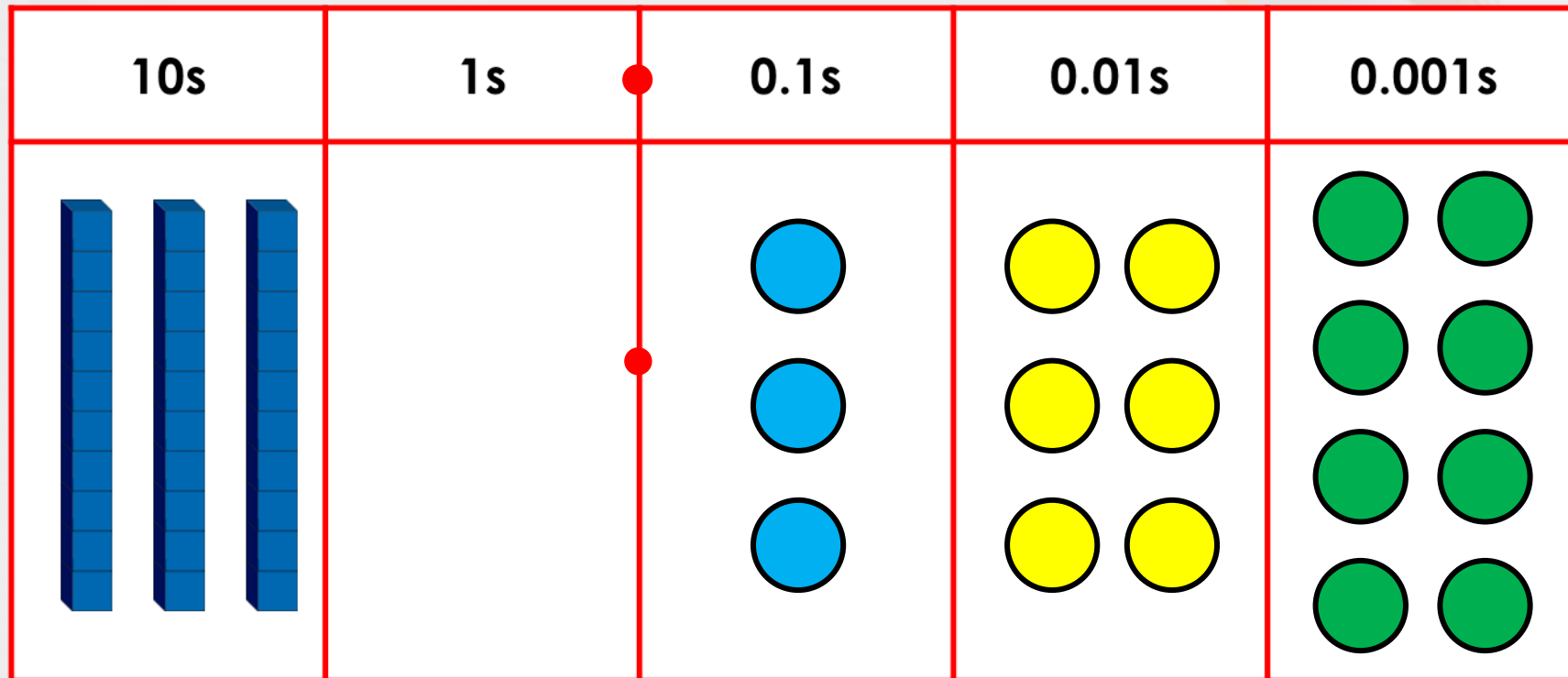
Class Question 2

Use the place value chart to represent a number which has three tens no ones, three tenths, six hundredths and eight thousandths.

10s	1s	•	0.1s	0.001s	0.001s
		•			

Varied Fluency 2

Use the place value chart to represent a number which has three tens no ones, three tenths, six hundredths and eight thousandths.



Varied Fluency 3

In which number does the digit 3 have the highest value?

217.03

0.399

109.431

Varied Fluency 3

In which number does the digit 3 have the highest value?

217.03

0.399

109.431

This represents 3 tenths.

Varied Fluency 4

Use the digit cards to create the greatest and smallest number possible.



Tens	Ones	Tenths	Hundredths	Thousandths

Varied Fluency 4

Use the digit cards to create the greatest and smallest number possible.



Tens	Ones	•	Tenths	Hundredths	Thousandths
7	6	•	5	4	2
2	4	•	5	6	7

Three decimal places

- 1 Use place value counters to make the numbers.
Draw your answers.

a) 1.343

T	O	Tth	Hth	Thth

b) 16.052

T	O	Tth	Hth	Thth



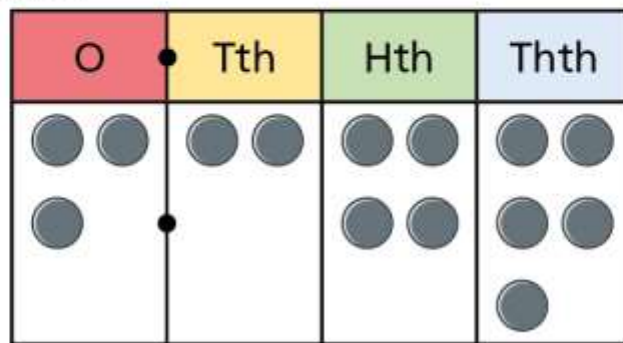
1 c) 7.001

T	O	•	Tth	Hth	Thth
		•			

d) 70.01

T	O	•	Tth	Hth	Thth
		•			

2 Complete the sentences.



There are ones.

There are tenths.

There are hundredths.

There are thousandths.

The number in digits is

3 Write the value of the 3 in each number.

a) 3.65 _____

b) 0.093 _____

c) 18.31 _____

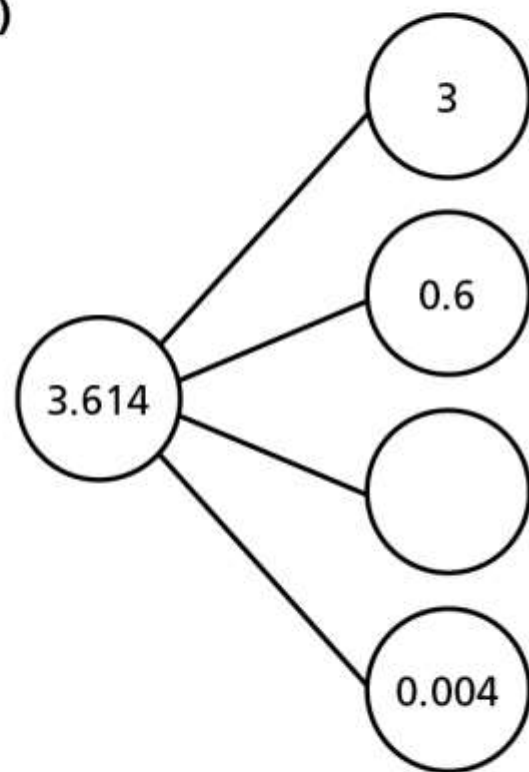
d) 72.439 _____

e) 32.701 _____

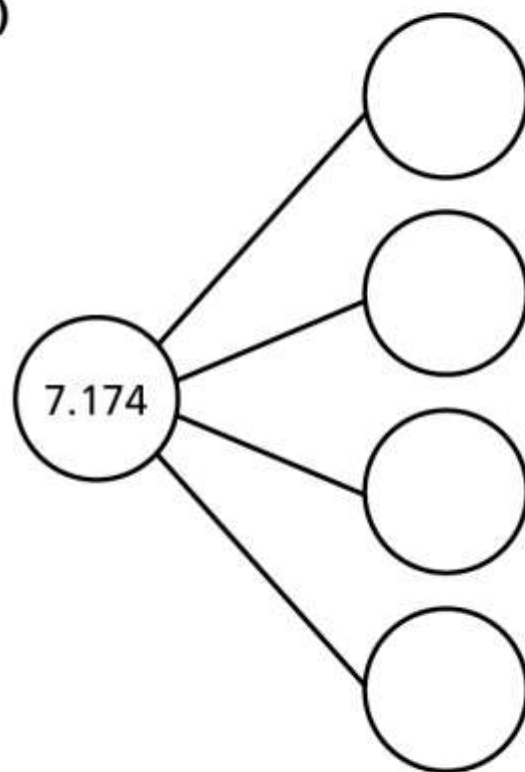
f) 19.03 _____

4 Complete the part-whole models.

a)



b)



5 Complete the number sentences.

a) $17.134 = 10 + 7 + 0.1 + \boxed{} + 0.004$

b) $94.077 = 90 + 4 + 0.07 + \boxed{}$

c) $\boxed{} = 30 + 4 + 0.07 + 0.009$



6 Complete the number sentences.

$$1.456 = 1 + 0.4 + \boxed{} + 0.006$$

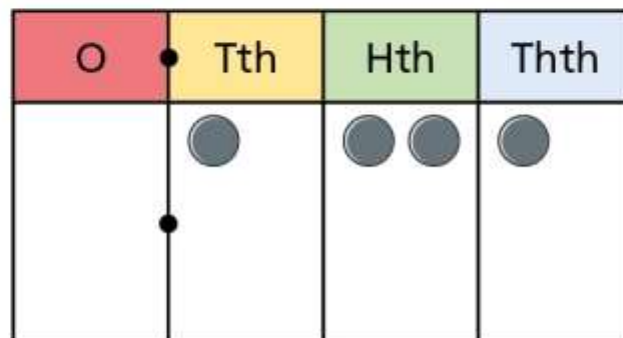
$$1.456 = 1 + 0.3 + \boxed{} + 0.006$$

$$1.456 = 1 + 0.2 + \boxed{} + 0.006$$

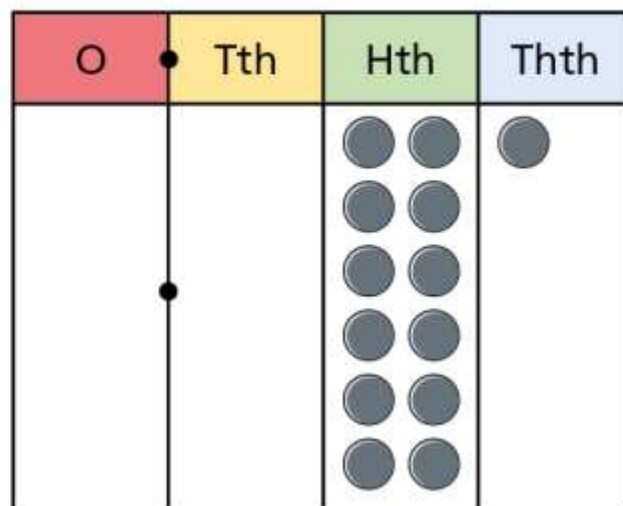
$$1.456 = 1 + \boxed{} + 0.006$$

- 7 Mo and Annie have represented 0.121 on their place value charts.

Mo's chart



Annie's chart



7



Mo

Only my grid
shows 0.121

Both our grids
show 0.121



Annie

Who do you agree with? _____

Explain why.

Answers

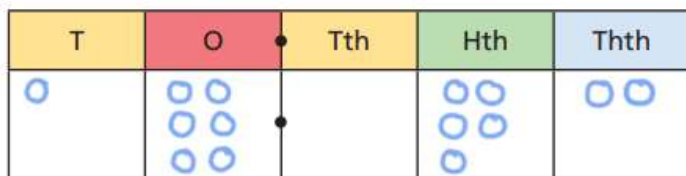
1 Use place value counters to make the numbers.

Draw your answers.

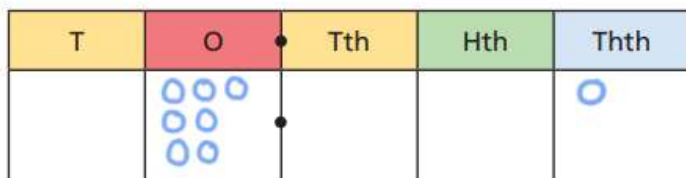
a) 1.343



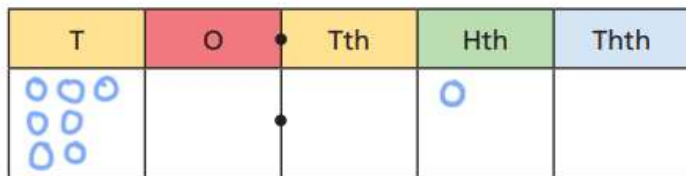
b) 16.052



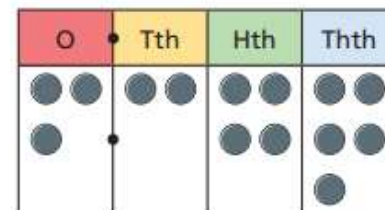
c) 7.001



d) 70.01



2 Complete the sentences.



There are ones.

There are tenths.

There are hundredths.

There are thousandths.

The number in digits is

3 Write the value of the 3 in each number.

a) 3.65 3 ones

b) 0.093 3 thousandths

c) 18.31 3 tenths

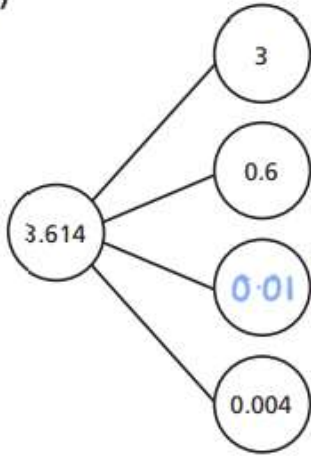
d) 72.439 3 hundredths

e) 32.701 3 tens

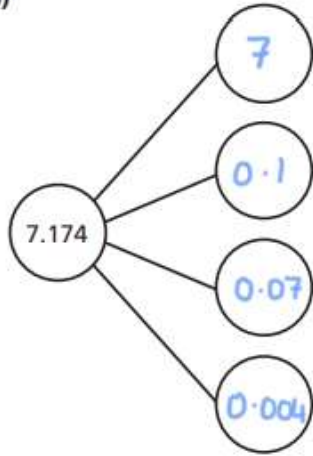
f) 19.03 3 hundredths

4 Complete the part-whole models.

a)



b)



5 Complete the number sentences.

a) $17.134 = 10 + 7 + 0.1 + \boxed{0.03} + 0.004$

b) $94.077 = 90 + 4 + 0.07 + \boxed{0.007}$

c) $\boxed{34.079} = 30 + 4 + 0.07 + 0.009$

6 Complete the number sentences.

$1.456 = 1 + 0.4 + \boxed{0.05} + 0.006$

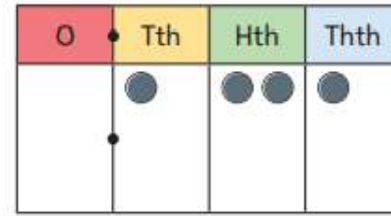
$1.456 = 1 + 0.3 + \boxed{0.15} + 0.006$

$1.456 = 1 + 0.2 + \boxed{0.25} + 0.006$

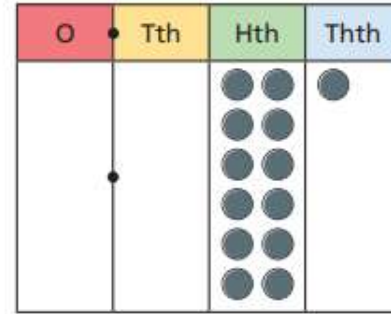
$1.456 = 1 + \boxed{0.45} + 0.006$

7 Mo and Annie have represented 0.121 on their place value charts.

Mo's chart



Annie's chart



Mo

Only my grid shows 0.121

Both our grids show 0.121



Annie

Who do you agree with? Annie

Explain why.

Annie could exchange 10 hundredths for one tenth then their grids would be the same.