Complete the stem sentences.
Complete the stem sentences.


The whole is $\qquad$ .

The parts are
$\qquad$ and $\qquad$ .

Complete the part-whole models.


Draw part-whole models to partition these numbers into tens and ones:


Draw part-whole models to partition these numbers into tens and ones:


True or false?
True or false?


Matt


Explain your answer.
Can you correct any of the part-whole models that are wrong?


Matt


Explain your answer.
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Seren is using digit cards to make
 number sentences.


Seren is using digit cards to make number sentences.

How many different part-whole models could Seren make?


How many different part-whole models could Seren make?

## Partition into Tens and Ones

Complete the stem sentences.


The whole is $\qquad$ .

## Partition into Tens and Ones

Children will develop their understanding of place value in numbers to 50 by using part-whole models to partition them into tens and ones. Provide base ten equipment to support them in this.

How are numbers arranged in a part-whole model?
Which circle shows the whole? Which show the parts?
How many tens are there? What number do they represent?
How many ones are there? What does this tell you?
What is the whole?
What are the parts?
Does it matter which way round the parts are arranged? Why not?
Can you use the base ten equipment to represent 27 ?
How many tens will you need? How many ones?
What is the whole? What will the parts be? How do you know?
How will you find the missing whole?
How many tens/ones will be in the whole number? Prove it.

## Stem Sentences

- The whole is $\qquad$
$\qquad$ and $\qquad$
Complete the part-whole models.


Draw part-whole models to partition these numbers into

- There are $\qquad$ tens and $\qquad$ ones.
- The number is $\qquad$



## Partition into Tens and Ones

True or false?

## Partition into Tens and Ones

Children will develop their understanding of partitioning numbers to 50 using part-whole models. They will identify the number of tens and ones in a number and use this when reasoning. Provide additional equipment such as base ten to support them in this.

How are the part-whole models similar? How are they different?
How many groups of ten are in the number $\qquad$ ? How many ones?
Does the part-whole model show this? How?
What is the whole? What are the parts?
What equipment could you use to check whether the part-whole model is correct? How will you use it?

What mistake has been made?
What changes need to be made to correct this?
Choose one of the numbers. How many different ways can you represent this using a part-whole model and equipment?

## Stem Sentences

- ___ has $\qquad$ tens and $\qquad$ ones.
- The whole is $\qquad$ and the parts are $\qquad$ and $\qquad$
- The part-whole model is correct/incorrect because..


Matt


Explain your answer.
Can you correct any of the part-whole models that are wrong?

Adult Guidance with Question Prompts

## Partition into Tens and Ones

Provide base ten to support children as they develop their understanding of how numbers in a part-whole model are arranged to show how a two-digit number can be partitioned into tens and ones.

What can you tell me about the numbers on the cards?
Can you represent them using base ten?
How many tens are in $\qquad$ ? How many ones? How do you know?
How are numbers arranged on a part-whole model?
Which numbers are most likely and least likely to be the whole? Explain why.
Which two-digit number are you going to partition? Where will you place this on the part-whole model? Why?
What is the whole? What are the parts?
Can you use the base ten to prove this?
How many different part-whole models can you make?
Which cards have you used more than once? Explain why.

## Stem Sentences

- The number is $\qquad$
- There are $\qquad$ tens and $\qquad$ ones.
- The whole will be $\qquad$ and the parts will be $\qquad$ and


## Partition into Tens and Ones

Seren is using digit cards to make number sentences.


How many different part-whole models could Seren make?

The whole is 34 . The parts are 30 and 4.


The statement is false. Two of the part-whole diagrams are incorrect as the parts do not reflect the number of tens in the whole. These numbers could be partitioned in various ways, including:


## Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:


These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These activity cards might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

## Need Planning to Complement this Resource?

National Curriculum Aim
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of equal to, more than, less than (fewer), most, least

For more planning resources to support this aim


Our Planlt Maths resources include mastery content, linked Home Learning Packs, excellent extended problem-solving challenges in the form of Solvelts and Challenge Cards. Steps to Progression are also included, this document gives the suggested order to teach the Planlt Maths lessons and also supports teachers who use the White Rose scheme of learning to make full use of the resources available within Planlt Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

