



Develop children's understanding of 'unitising' with this set of White Rose Maths Pre-Money Counters. As part of the White Rose Scheme, children are introduced to the idea that groups containing or representing the same number of things can be treated as ones.

One item does not need to represent a value of one – this is called “unitising”. For example, A 5 pence coin represents five 1 pence coins. Pre-money counters are used to support children's understanding.

These counters are all the same size and colour and have dots on one side to represent their value. This helps children to see the value (cardinality) before they move on to coins where the value is not shown as a visual. By using objects that are the same size and colour, the focus is on exploring the different values that one counter can represent. This supports children to then understand that the value of coins is independent of size, shape, mass or colour

Notes and guidance

In this small step, children are introduced to the idea that groups containing or representing the same number of things can be treated as ones. For example a 5 pence coin represents five 1 pence coins. One item does not need to represent a value of one – this is called “unitising”.



Pre-money counters are used in this step to support children's understanding. These counters are all the same size and colour and have dots on one side to represent their value. This helps children to see the value (cardinality) before they move on to coins where the value is not shown as a visual. By using objects that are the same size and colour, the focus is on exploring the different values that one counter can represent. This supports children to then understand that the value of coins is independent of size, shape, mass or colour.

Things to look out for

- Children may not recognise that one item can have a value greater than 1. A pre-money counter with 5 dots has the same value as five pre-money counters with 1 dot.

Key questions

- How many dots are there on the counter?
- What is the value of the counter?
- How can you use counters to represent the value of the coin?
- How can you use coins to match the value of your counters?
- What is the same? What is different?
- What do you notice?

Possible sentence stems

- There are _____ dots.
The counter has a value of _____
- The _____ has a value of _____
- This is a _____ pence coin.
It has a value of _____

National Curriculum links

- Recognise and know the value of different denominations of coins and notes

Key learning



Give children a range of different pre-money counters to explore.



Discuss what is the same and what is different.
How many 1/2/5 counters have the same value as a 10 counter?



Show children a pre-money counter with a value of 1. Now show them a 1 pence coin. Explain that both have a value of 1



Show children two 1 pence coins. Ask them to represent the coins using pre-money counters. How many counters will they need? Why?

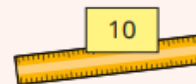


Repeat with 2, 5 and 10 pre-money counters and coins.

- Match the coins to the counters.



Set up a role-play shop and provide children with pre-money counters.



Can children show the correct value of pre-money counters for each item?

Is there more than one way to do it?

Reasoning and problem solving

Match the counters to the coins.



What other counters can you use to match the value of each coin?

Compare answers with a partner.

five 2 counters matched to 10 pence
five 10 counters matched to 50 pence
four 5 counters matched to 20 pence

Jo and Ron have some counters.



Jo



Ron

Whose counters have a greater total value?

Explain your answer.

Mo also has some counters.

His counters are worth more than Jo's but less than Ron's.

What counters could Mo have?

Ron

multiple possible answers to make a total of 6, e.g.



Unitising

1 What is the value of each counter?

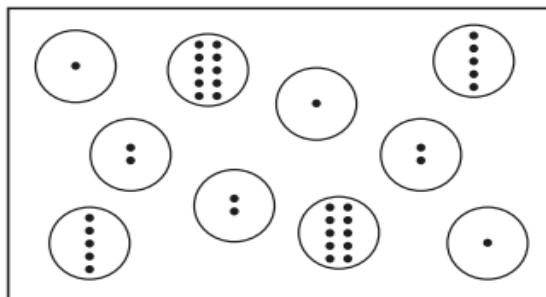
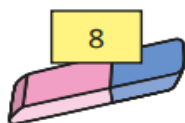


2 What is the total value of each set of counters?

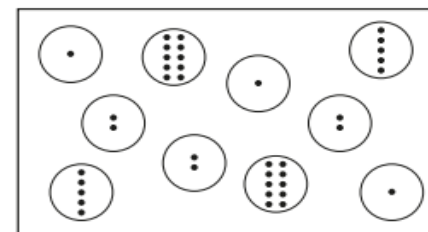
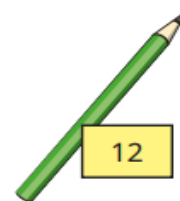


3 Choose the counters that have the same value as the items.

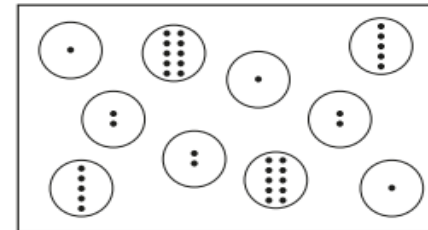
a)



b)



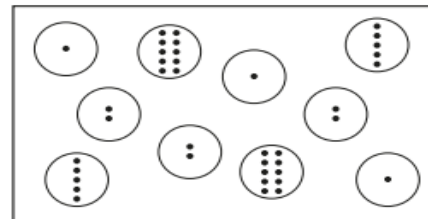
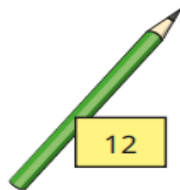
c)



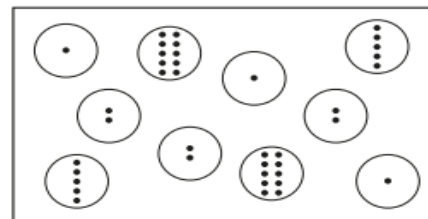
Compare answers with a partner.
Are they the same?

Unitising

b)

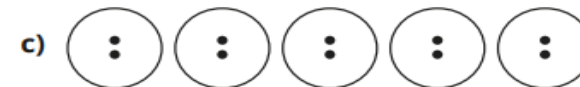
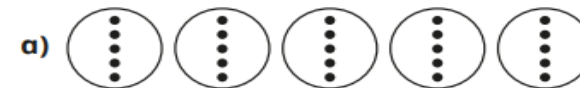


c)



Compare answers with a partner.
Are they the same?

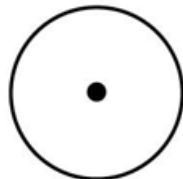
4 What is the total value of each set of counters?



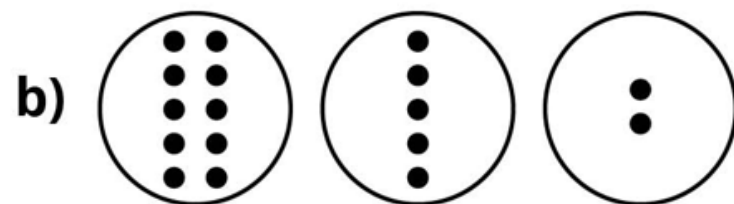
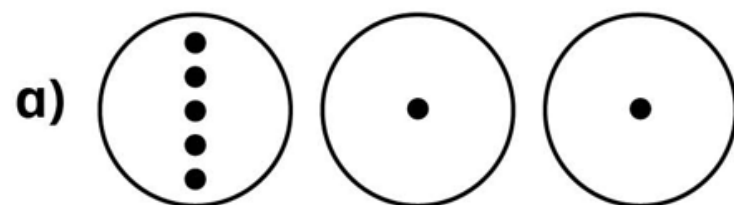
5 Match the counters to the coins.



1 What is the value of each counter?

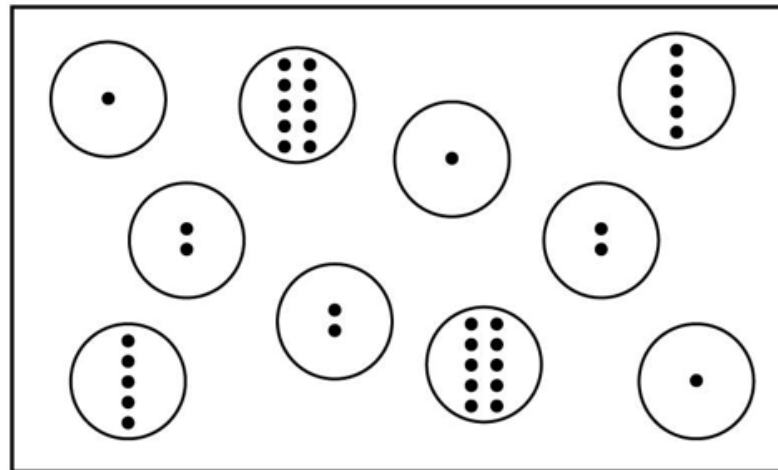
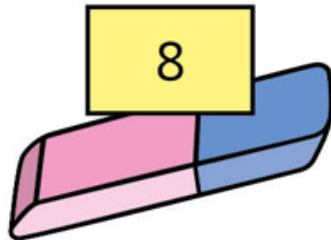


2 What is the total value of each set of counters?

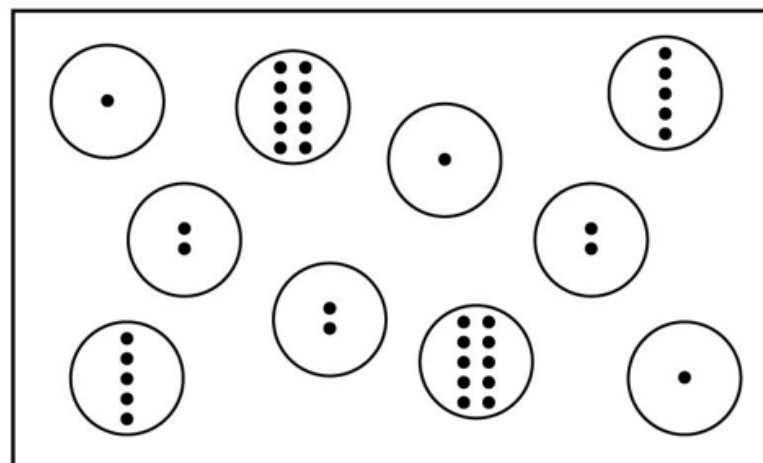
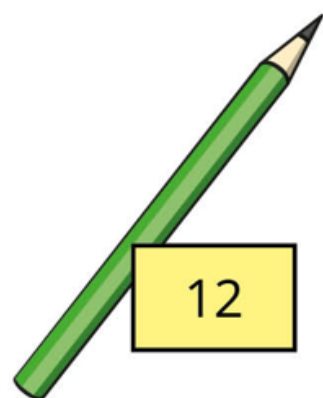


- 3** Circle the counters that have the same value as the items.

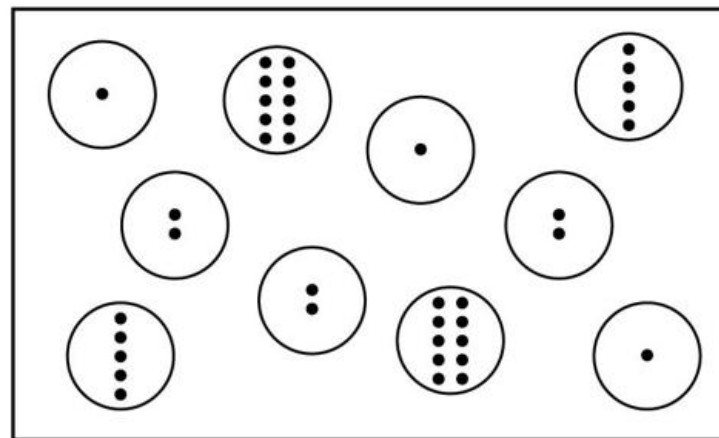
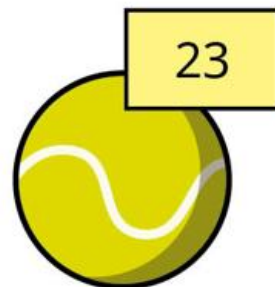
a)



3 b)





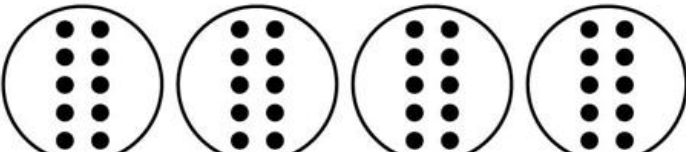

3 c)


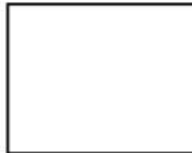


Compare answers with a partner.
Are they the same?

4 What is the total value of each set of counters?

a)  

b)  

c)  

5 Match the counters to the coins.

