**Decimals and Fractions Unit 1**

**Problem solving and reasoning questions**

Bea counts in quarters starting at one quarter.

She says five numbers then stops.

What number should she say next?

Fill in the missing fractions:

11/2, 2, 21/2, 3, , 4, , 5

4, 33/4, 31/2, , 3, , 21/2

8/10, 9/10, , , 12/10

Write all the fraction facts for tenths of 60.

1/10 of 60 =

2/10 of 60 =

etc. to 10/10

Use this bar diagram

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 48 | | | | | | | |
|  |  |  |  |  |  |  |  |

to help find answers

1. 1/8 of 48 =
2. 3/8 of 48 =
3. 7/8 of 48 =

Is 1/10 of 50 the same as 1/5 of 100?

**Decimals and Fractions Unit 1**

**Problem solving and reasoning answers**

Bea counts in quarters starting at one quarter.

She says five numbers then stops.

What number should she say next? 11/2 (or 12/4)

Check on a number line divided into quarters, also useful for next question if children are struggling.

Fill in the missing fractions:

11/2, 2, 21/2, 3, 31/2 , 4, 41/2 , 5

4, 33/4, 31/2, 31/4 , 3, 23/4, 21/2

8/10, 9/10, 1 , 11/10 , 12/10

Write all the fraction facts for tenths of 60.

1/10 of 60 = 6

2/10 of 60 = 12

etc. (18, 24, 30, 36, 42, 48, 54) to 10/10 = 60Do children make the connection to 6x table facts?

Use this bar diagram

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 48 | | | | | | | |
| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |

to help find answers

1. 1/8 of 48 = 6
2. 3/8 of 48 = 18
3. 7/8 of 48 = 42

Is 1/10 of 50 the same as 1/5 of 100?

No, since 1/10 of 50 = 50 ÷ 10 = 5 and 1/5 of 100 = 100 ÷ 5 = 20.