

Spotlight 5: a learning check

Interprets division as sharing but not as grouping (repeated subtraction) so is unable to interpret a calculation such as $12 \div \frac{1}{2}$

Opportunity for: discussing and explaining

Picture match game

Time 10–15 minutes

Resources

- *Picture match game board* (Resource sheet 43)
- *Picture match game cards* (Resource sheet 44)
- At least two players
- Calculators
- Rewards such as counters, stickers, etc.

Check: does the child use key vocabulary?

halves	how many halves in...?
quarters	divided into halves
whole ones	hops of a half
fractions	divided into half
divided by	half of

Teaching activity

Put out the game board (Resource sheet 43) for **Picture match game** and give the children a chance to look at it carefully and to count the jumps, and so on. Encourage them to talk to each other about what they see.

Put out, face up, an even number of the picture match cards from Resource sheet 44. (If you wish, you can just use the cards in the left-hand column of the sheet. These all go with pictures 1 and 3. The cards in the right-hand column all go with the pictures, except for the last one, which doesn't match any of the pictures.)

How to play

1. The players take turns to pick a card, read it to the other player and decide which picture that number sentence can go with. (Some sentences will go with more than one picture. Some sentences might not go with any of the pictures.)
2. If everyone agrees that they are right, the player will win a reward. If they aren't right, the card then passes to the other player, and, if they are right, they get another turn.
3. Take turns until all the cards are used up and the player with the most rewards wins.

? How did you decide that card went with that picture?

? Will that number sentence go with any of the other pictures as well?

Variations

- Pairs can play cooperatively or play against another pair.
- Don't provide any cards but ask the players to make cards for all four pictures and then give the cards to another pair.
- Let the children make four pictures and related cards of their own, which they should give to another pair to sort out.

Learning outcomes

By the end of this set of activities, children should be able to:

- tackle related learning tasks with increased motivation and confidence;
- use and understand connected mathematical vocabulary;
- interpret a calculation in which there is dividing by a fraction;
- explain their drawings and mental images when dividing by fractions;
- solve real-life problems involving division by fractions;
- begin to generalise about number patterns when dividing by a number less than one.