

Spotlight 5

Has difficulty relating multiplying by two to known facts about doubles; records double four as $4 + 4$

Opportunity for: explaining and discussing

Double it

Time 15–20 minutes

Resources

- Card strips of different lengths, for example 3 cm, 6 cm, 2 cm, 4 cm, 8 cm, 5 cm, 10 cm (two or three of each)
- *Doubling cards* (Resource sheet 33)
- Number cards (Resource sheets 1 and 2)
- *Dotty cards* (Resource sheet 9)
- Cubes
- At least one other child

Check: does the child use key vocabulary?

double	double the length
multiply by two	equals
tower	is not twice
match	

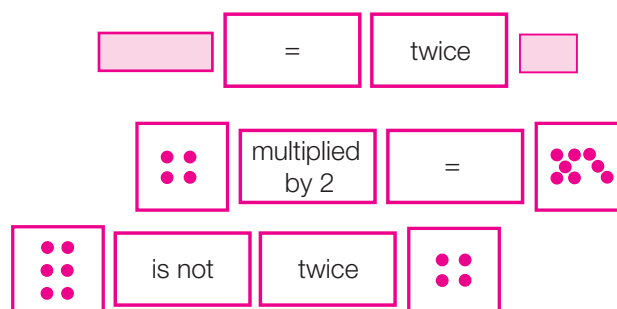
Teaching activity

‘We are going to play a game, **Double it**, today. It is about doubling being the same as multiplying by two.’

Put the card strips, cubes, dotty cards and number cards face up on one side of the table, and the vocabulary cards on the other side. The game is intended for cooperating pairs, but children could race each other.

How to play

1. Players take a vocabulary card which they think they can make a sentence with, for example, ‘multiplied by 2’.
2. They then select a card strip, dotty card, cube ‘train’, or number card to make a ‘picture’ number sentence, for example:



Continue the activity, checking the players’ understanding by asking them to explain their picture sentences.

Variations

- Use only number cards and try some larger numbers.
- Race to make three sentences in 5 minutes.

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;
- make the link between doubling and multiplying by two;
- record number sentences using double or multiply by two interchangeably.