

Spotlight 5: a learning check

Is insecure in making links between addition and subtraction and/or recognising inverses

Opportunity for: explaining and discussing

5 Y2 +/–

Card triples

Time 5–15 minutes

Resources

- Number cards used in earlier Spotlights
- Three hoops or pieces of paper
- At least four players
- A scorer with a calculator

Check: does the child use key vocabulary?

| | |
|--------------------|-----------------|
| add | goes together |
| addition | inverse |
| subtract | opposite |
| subtraction | other way round |
| take away | larger |
| difference between | largest |
| leaves | smaller |
| altogether make | smallest |

Teaching activity

‘This game, **Card triples**, will help you with understanding how addition and subtraction number sentences go together.’

Lay out some cards that the child is familiar with in the three hoops – the largest numbers in one hoop and smaller ones in the two other hoops. For example, if 5 is in one hoop and 10 is in the other, you need to have 15 in the third hoop, but it adds interest to the game if you just put some numbers randomly.

Children can cooperate in pairs to play.

How to play

| | | | | | |
|---|----|----|---|---|---|
| 5 | 10 | 15 | 3 | 4 | 7 |
|---|----|----|---|---|---|

1. Pairs of children work together to take one number from each hoop that ‘go together’ to make a card triple. For example, they could take 3, 4 and 7.
2. They score the number of points for their largest number, in this instance, 7.
3. Then they must say one addition sentence that they can make with the three cards, for example $3 + 4 = 7$. Again, they score 7 if they are correct.
4. They must then make a subtraction sentence to score another 7.
5. The scorer notes the score and can use a calculator to help.
6. Then the other pair selects three cards and makes number sentences in the same way.
7. The pair with the highest score wins.

Variations:

- An easier game is for pairs just to collect card triples and justify why their cards go together.
- Play that first variation at speed, both pairs taking cards as quickly as they can until most of the cards are gone.

? Why has no-one taken that card?

- Extend the game by making a two-digit number with cards, for example 27, and making four related number sentences with that two-digit number, for example, $27 - 6 = 21$.

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;
- understand inverses, explaining how addition undoes subtraction;
- choose three related numbers and explain why they are related;
- understand an appropriate way to write an addition and subtraction sentence.