## Memory to ten

## Rationale

In order to become skilled at mental arithmatic, students need to learn and practice efficient strategies. As we mostly work with a base-ten number system, a starting point for many good strategies is for students to become familiar with all the pairs of whole numbers that add to make ten. This set of activites helps students to build a working familiarity around the number ten; to understand the different ways it can be broken up and put together. This knowledge can then be extended, ultimately allowing students to quickly and confidently solve maths problems in their heads.

## Teaching notes

For students to become skilled in instantly recalling 'pairs to ten', they need to spend time repeatedly working on problems that require them work out 'pairs to ten' without becoming bored or disengaged. This activity provides this practice, assisted by the use of ten-frames, within an engaging game-based framework.

## Language

Useful questions to ask students when doing this activity are:

- What number is that?
- How many empty squares are there? (on the ten frame)
- What number do you need to make 10?
- How many more do you need to make 10?
- Does that make 10?

