

# FRIENDS OF 20 - INFORMAL

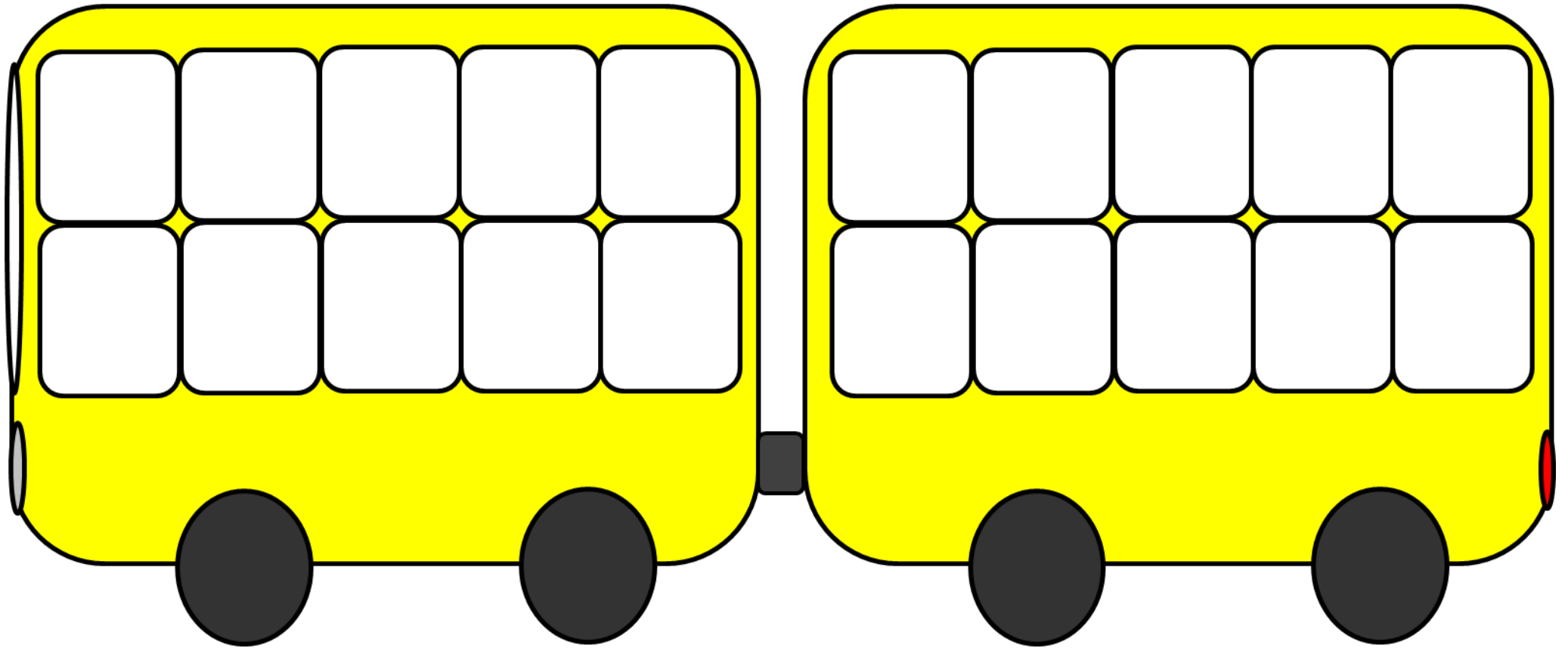
## INVESTIGATIONS OVERVIEW PAGE

THIS PAGE IS A SUMMARY OF THE INVESTIGATIONS THAT STUDENTS MAY ENGAGE IN TO DEEPEN THEIR RELATIONAL UNDERSTANDING. INVESTIGATIONS WITH INSTRUCTIONS TO STUDENTS FOLLOW ON SUBSEQUENT PAGES.

- In pairs, children place two 10 frames side-by-side. They select a teen number and place the corresponding number of counters onto the 10 frames, filling the 10 frame on the left from the top row on the left first, then the 10 frame on the right from the top row on the left. They identify how many more they need to make 20. They record their 10 frames, their counters and their friends of 20. *Reflection: What are friends of 20?*
- In pairs, children have a 20 Frame Train. One child places a teen number of counters on the train filling the carriage on the left - top row then bottom row - first, then the carriage on the right to act as children, explaining 'There are ... children on the train'. The second child works out the number of empty seats on the train. *Reflection: What are friends of 20?*

Empty 10 frame (print, cut out and distribute two 10 frames to each child) [back](#)

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Numerals 11-19 (print, cut out and distribute to each child)

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|----|----|----|----|
| 14 | 16 | 17 | 18 |
| 19 | 15 | 13 | 12 |
| 11 |    |    |    |

## Friends of 20 - Informal

Place two 10 frames side-by-side.

Select a teen number card to and place the number of counters onto the 10 frames, filling the 10 frame on the left from the top row on the left first, then the 10 frame on the right from the top row on the left.

Ask and answer the 4 questions:

- How many in the 10 frame on the left?
- How many in the 10 frame on the right?
- How many altogether?
- How many more to make 20?

Record your friends of 20.

Reflection: What are friends of 20?

The image shows two identical 10 frames side-by-side. Each frame is a large rectangle divided into two rows of five smaller squares. The left frame is on the left and the right frame is on the right. Both frames are currently empty.

## Friends of 20 - Informal

Have a 20 frame train.

Select a teen number.

Place that number of counters onto the 20 frame train as children, filling the carriage on the left from the top row on the left first, then the carriage on the right.

How many 'children' do you need to fill the train?

Record your friends of 20.

Reflection: What are friends of 20?

