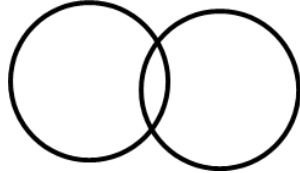


# HIGHEST COMMON FACTOR.

## 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 have 4 cards to make 2 two-digit numbers. They find the factors of each number. They then find the common factors. They then find the highest common factor. *Reflection: How can we find the highest common factor of 2 numbers?*
- In pairs, children record 2 overlapping circles, for example,   
They each select cards to make a two-digit number.  
They record the factors of each number in their circle, with common factors in the overlapping section.  
They identify the highest common factor. *Reflection: How can we find the highest common factor of 2 numbers?*
- In pairs, children record the numbers 1 to 9. They take turns to flip cards to make a two-digit number. They cross out the factors of their number. The child with all of their numbers crossed out first, wins. *Reflection: How can we find factors?*
- In pairs, children select cards to make 3 numbers. They find the factors of each number. They then find the common factors. They then find the highest common factor. *Reflection: How can we find the highest common factor of 3 numbers?*

## Highest Common Factor

Select 4 cards to make 2 two-digit numbers.

Record each number's factors.

Record your numbers' common factors.

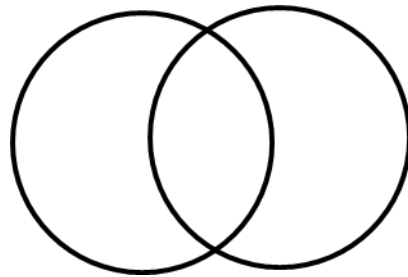
Record your numbers' highest common factor.

Reflection: How can we find the highest common factor of 2 numbers?

## Highest Common Factor

Sit with a friend.

Record 2 overlapping circles, for example,



Each select cards to make a two-digit number.

Record the factors of each number in their circle, with common factors in the overlapping section.

Identify the highest common factor.

Reflection: How can we find the highest common factor of 2 numbers?

## Highest Common Factor

Sit with a friend.

Record the numbers 1 to 9 in a list.

Take turns to flip cards to make a two-digit number.

Cross out the factors of your number from your list.

The child with all of their numbers crossed out first, wins.

Reflection: How can we find factors of numbers?

## Highest Common Factor

Select 6 cards to make 2 three-digit numbers.

Record each number's factors.

Record your numbers' common factors.

Record your numbers' highest common factor.

Reflection: How can we find the highest common factor of 3 numbers?