

Knock 'em Off

Activity

For this activity, students need 3 dice or playing cards. They should roll the dice or flip over the playing cards and then try to create number sentences that yield any of the ball numbers as answers. How many of the balls is it possible to 'knock' off of the shelf using the numbers students have rolled/flipped?

To support

- ① Do a practise session together and ask guiding questions:
 - What numbers can we make if we just add two of the dice/card numbers?
 - What if we subtract one dice/card number from another?
 - What numbers can we make if we include the third dice/card?

To challenge

- ①
 - Ask students to apply order of operations when writing out their number sentences.
 - Is it possible to knock off all of the numbers?
 - What other numbers can students make with the dice/card numbers?
 - Get students to roll/flip again to get new numbers.



Knock 'em Off

Roll 3 dice.

What number sentences can you make if you can add, subtract, multiply or divide?

If you get an answer that matches one of the balls on the shelf, you can knock it off.



Solution

I rolled a 6, 1 and 3.
I managed to knock
all of the balls off
of the shelf!



$$6 + 1 = 7$$

$$6 + 3 = 9$$

$$3 + 1 = 4$$

$$6 - 1 = 5$$

$$3 - 1 = 2$$

$$6 \div 1 = 6$$

$$6 + 3 + 1 = 10$$

$$6 \div (3 - 1) = 3$$

$$(3 - 1) + 6 = 8$$

$$6 \div 3 - 1 = 1$$