Unit 2 Module 2 Session 2

Problems and Investigations- Count-Arounds
Problems and Investigations-Cube Trains and Multiples Strips

Getting Ready-

- Chart Paper (see preparation)
- 30" strip of adding tape
- A strip of adding tape for each student (see preparation)

Vocabulary

Equation

Factor

Measuring Strip

Multiple

Product

- Use and explain repeated addition, skip-counting, doubling, doubling and halving, and use partial products
- Look for patterns in basic multiplication facts

You will call out multiples of a particular number (skip-counting) and whisper all the other numbers as the whole class counts to a certain number.

Let's start with the multiples of 2 up to 80

1,**2**,3,**4**,5,**6**,7,**8**,9,**10**,11,**12**

(call out the bolded numbers, they are the multiples of 2)

Multiples of 2

2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80

Let’s try the multiples of 4 to 80

Multiples of 2

2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80

Multiples of 4

4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80

Let’s try the multiples of 8 to 80

Will there be more multiples or fewer multiples of 8? Why?

- **Will everyone get to call out a number? Why or why not?**

- **Can you estimate how many people will get to call out a number? Tell us more about your estimate.**

- **What happens as the number we are counting by gets bigger?**

Multiples of 2

2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80

Multiples of 4

4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80

Multiples of 8

8, 16, 24, 32, 40, 48, 56, 64, 72, 80

How many multiples of 4 did we list?
How many multiples of 8 did we list?
Why do you think that is?

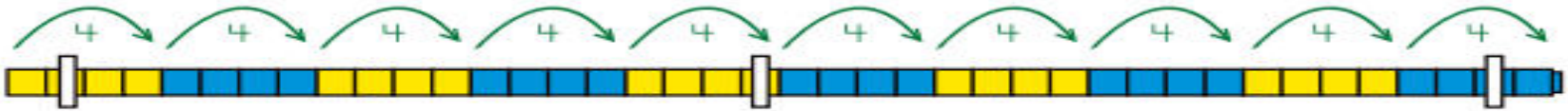
What do you notice about these cubes?

How can this measuring strip be helpful to you?

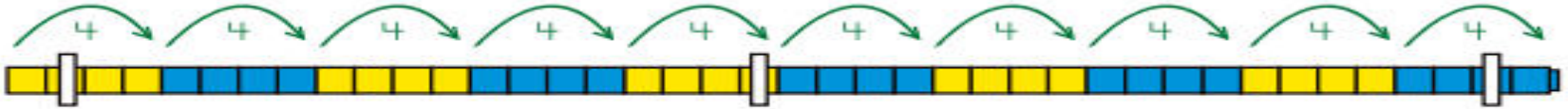
Does this display of cubes remind you of anything we have done lately?

This measuring strip counts by 4s. What might that help you with?

Have we figured out anything else that was 10 times 4 recently?



Hint Hint

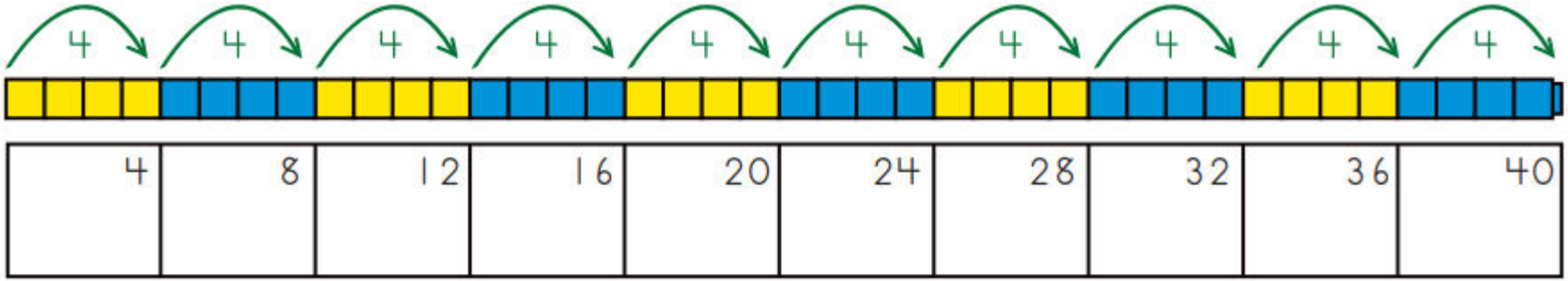


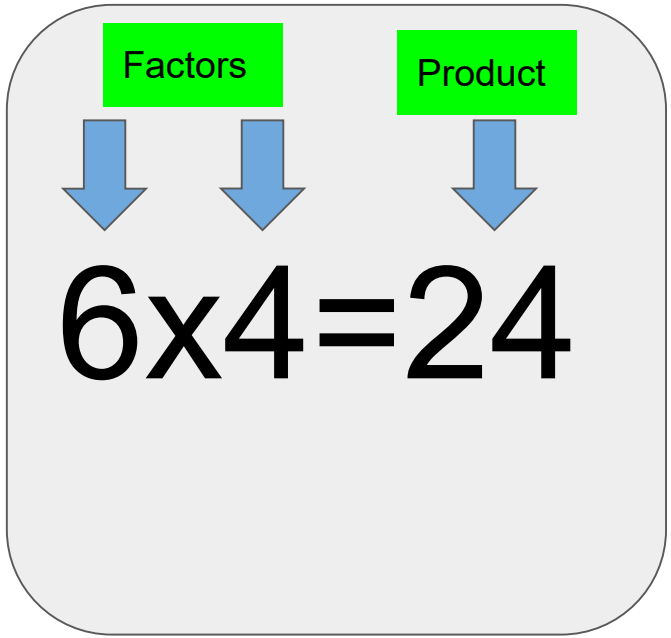
Would you add or change anything about the cube train easier to use?

How about this?

We can use this to find the multiples or groups of 4 easily.

What would 5 groups of 4 equal? What would the equation look like?
What would 9 groups of 4 equal? What would the equation look like?
What would 4 groups of 4 equal? What would the equation look like?



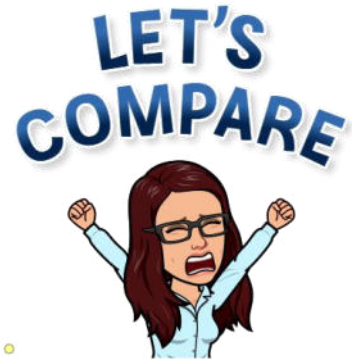


Multiples

4,8,12,16,20,24,28

Time to make your cube trains and paper multiple strips to match.

You need to have 10 groups of whichever number you are working on.



- Pairs of students who worked on multiples of 2, 4, and 8 will join together.
- Pairs of students who worked on multiples of 3, 6, and 9 will join together.
- Pairs of students who worked on multiples of 5 and 10 will join together.

Line up your strips so the smallest strip is at the top and the biggest strip is at the bottom.

2	4	6	8	10	12	14	16	18	20

3	6	9	12	15	18	21	24	27	30

4	8	12	16	20	24	28	32	36	40

5	10	15	20	25	30	35	40	45	50

6	12	18	24	30	36	42	48	54	60

7	14	21	28	35	42	49	56	63	70

8	16	24	32	40	48	56	64	72	80

9	18	27	36	45	54	63	72	81	90

10	20	30	40	50	60	70	80	90	100

Do you see any numbers that appear on a lot of the paper multiples strips?

Look for the number 24.

How many strips have 24 on them?

Why is 24 on so many multiples strips?

Work Places

1D Subtraction Bingo

1E Carrot Grab

1F Rabbit Tracks

1G Target One Hundred

1H Anything But Five

2A Loops and Groups

Daily Practice

SB 46 Seascape Challenges

Home Connection

HC 27-28 Skip-Counting and More