

## Lesson 9 (~~49/6~~) (21<sup>st</sup> June)

Objectives: Students will be able to explain

- ① what it means for a number to have another number as its multiple (and vice versa)
- ② List multiples of a natural number.
- ③ Check whether a number is a multiple of another number.
- ④ Solve problems ~~using~~ Common multiples involving by any method.

Plan

Do now (while I check homework)

10 min

Kids are ready with their notebooks (reinforce routine)

Distribute worksheets.

Kids try and solve Q 21, ~~Q 25~~ 16, 17, 18, 24, 25.

Opening (or INM)

Read Q2 from worksheet.

How many legs does a spider have?  
" " a fly have?

10 min

If there were only ~~only~~ spiders in the room, how many legs can we have total?

If only spiders  $\rightarrow$  8, 16, 24, ...

If only flies  $\rightarrow$  6, 12, 18, 24, ...

$\rightarrow$  " which are also known as multiples of 8"  
 $\rightarrow$  " mult. of 6"

Now, a person counts a total of 22 legs.  
How can this be possible?

$\rightarrow$  a) Is it possible to have only spiders?

b) or only flies. Why?

So, we need a combinat<sup>n</sup> of legs  $\rightarrow$  No.

of spiders and flies.  
We need to observe which combinat<sup>n</sup> can give us 22.

5 min

Read Q3 from worksheet.  
Kids try to solve the problem with the same guiding questions.

### Planet Vuv

Zios → ~~3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54~~

Zios → 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55

Zepts → 7, 14, 21, 28, 35, 42, ~~49~~, 56

5 min

We need to find how can we form 52 legs.

Combination of any two numbers where we can get a total of 52.

↳ "Kids try to figure out. If they are not able to, I give 10 and 42."

← ~~means~~  
what does this mean?

That on Vuv, 2 Zios and 6 Zepts.  
["One more possibility, check at home"]

### I.P

A similar problem occurred when packaging 'Kitkat chocolates'. Read Q19.

\* Boxes of 2 sizes. → 3 ch.  
→ 5 ch.

We want to fit 46 chocolates.

What is the min. no. of ~~chocolates~~ <sub>boxes</sub> required.

15 min

↳ If you finish early, try Q6.

To find min., we must use max. of bigger boxes.

→ 5, 10, 15, 20, 25, 30, 35, 40, 45, 50

→ 3, 6, 9, 12, 15, 18, 21, - - - -

Q: Can we use all bigger boxes?

2. No, since we don't want to waste space.

Q: What is the max no. of bigger boxes we can use?

↳ 9?, (8)?, 7?

(10 bigger boxes, not a good idea.)

Q: Try to find other possible solutions.

6? x (5)?

IP: Q-6, \*

10 min  
H.W  
Q-7,  
Q-8,  
Q-9,  
Q-10.

\* IF instead of 46, we had a very large number say 108.

What would we have done.

5) 108 → 21<sup>big</sup> boxes.

3 remaining → 1<sup>small</sup> box.

5 min

H.W → Q2, 3, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, 21, 22, ~~23~~, 24, 25.

(1 hr)

Try → Q5