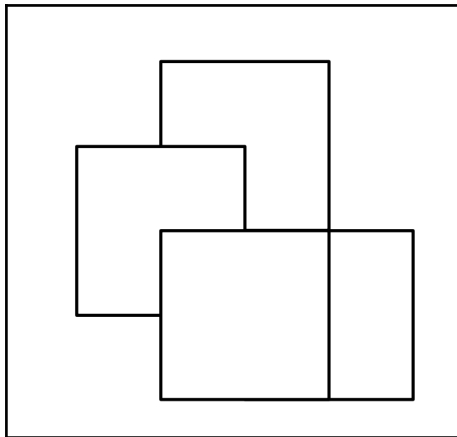# Year 4 Learning From Home
Subject: Mathematics
Term 4, Week 3, Wednesday 20/10/21

What is the area?

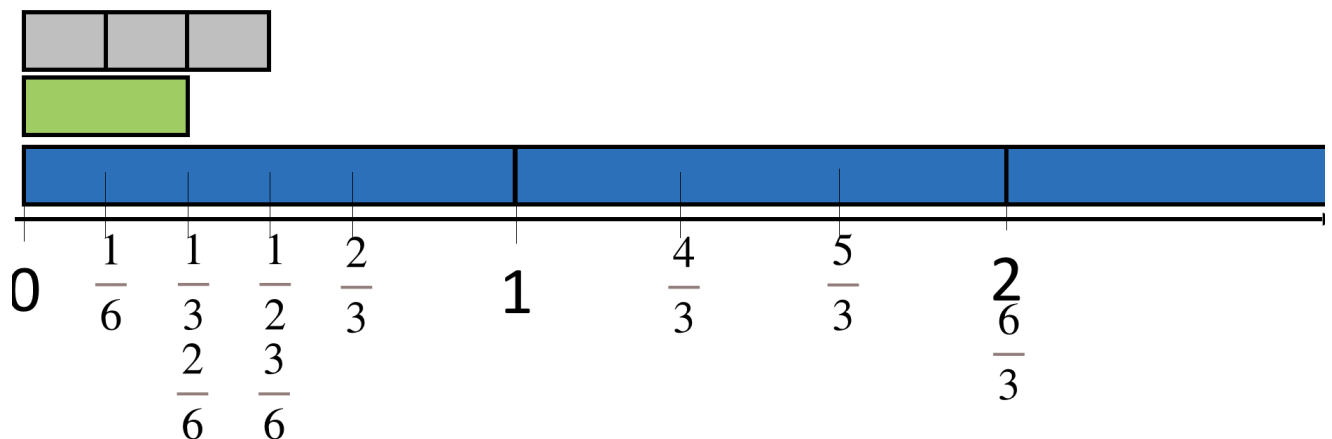If the large square has an area of 1, what is the area of the whole shape? How do you know?

Task :   **Fractions on the number line**

Louisa and Timothy were asked to draw a number line and show where the fractions ⅓ and ⅙ were. They each wrote a sentence to explain their diagram. Louisa wrote the first sentence and Timothy wrote the second sentence:

Three sixths is the same amount as one half.
One sixth is half of one third.

$$0 \qquad \frac{1}{6} \qquad \frac{1}{3} \quad \frac{2}{6} \qquad \frac{1}{2} \quad \frac{3}{6} \qquad \frac{2}{3} \qquad 1 \qquad \frac{4}{3} \qquad \frac{5}{3} \qquad 2\frac{1}{6} \quad \frac{2}{3}$$

1. What colour rod shows thirds? Sixths?
2. Do you agree with Louisa's explanation? Why/Why not?
3. Do you agree with Timothy's explanation? Why/Why not?
4. Can you extend Louisa's thinking to show where ⅚ would be?
5. Where would 2 ⅙ (two and one sixth) be?

6. Both students said that this number line could be used to count by sixths starting at 0 and stopping at 3. Do you agree? Record the numbers for this counting.

For students who would like an extra challenge:
- Does this number line show mixed numerals or improper fractions?
- What is the difference between an improper fraction and a mixed numeral?
- Can you complete this count using mixed numerals ?