

INTRODUCING THE MULTIPLICATION TABLE OF 9

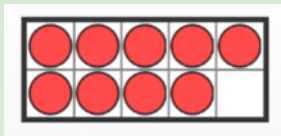
How do teachers allow students to grasp the skill via observation and logical deduction? With the help of ten-frames! Both physical ten-frames and the *Number Frames* app by Maths Learning Center can be used. Get the app (IOS, Android or desktop version) from

<https://www.mathlearningcenter.org/resources/apps/number-frames>



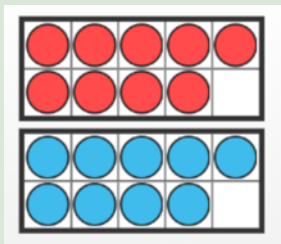
Teaching guide:

1. Show one ten-frame and fill it with 9 dots (or 9 circles).

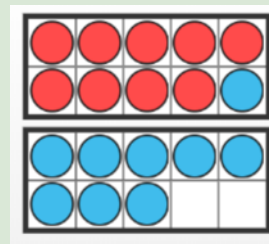


$$9 \times 1 = 9$$

2. Show two ten-frames each having 9 dots (better in different colours for a better visual effect). Move a blue dot to illustrate the product.

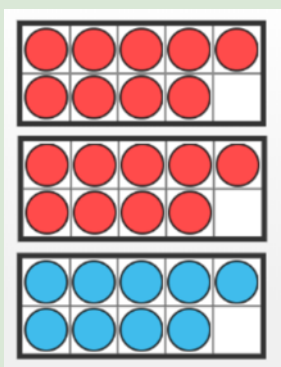


$$9 \times 2 = ?$$

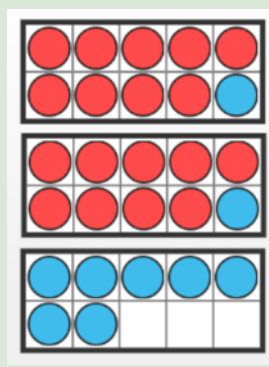


$$9 \times 2 = 18$$

3. Repeat the illustration with three ten-frames (i.e. move two blue dots to illustrate the product).



$$9 \times 3 = ?$$



$$9 \times 3 = 27$$

4. Ask students to observe and guess the answer. Then complete the whole multiplication table of 9.

$$9 \times 1 = 9$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

...

$$9 \times 6 = ?$$