** Activity 2 – Multiply by 9**

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| 1. Write a multiplication and a division calculation based on the bar model. | 2. Write a multiplication and a division calculation based on the bar model. |
| 3. Using the image below, complete the number sentences.  Macintosh HD:private:var:folders:5k:54k53_tn2wl58mfv0m4nnflm0000gn:T:TemporaryItems:Screenshot 2020-06-30 at 21.22.10.png | |
| 4. Using the image below, complete the number sentences.  Macintosh HD:private:var:folders:5k:54k53_tn2wl58mfv0m4nnflm0000gn:T:TemporaryItems:Screenshot 2020-06-30 at 21.22.30.png | |
| 5. Naomi is thinking of a number. Fay thinks she knows the answer.  Macintosh HD:private:var:folders:5k:54k53_tn2wl58mfv0m4nnflm0000gn:T:TemporaryItems:Screenshot 2020-06-30 at 21.31.32.png  Is Fay correct? Convince me. | |

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| 6. Circle the number sentences that are represented by the array.  . | | 7. Use the sentences to complete the calculations. |
| 8. Using the first calculation, complete the number sentences below.  Macintosh HD:private:var:folders:5k:54k53_tn2wl58mfv0m4nnflm0000gn:T:TemporaryItems:Screenshot 2020-06-30 at 21.26.32.png |  | |

**Answers**

1. **54 ÷ 6 = 9; 6 x 9 = 54**

2. **108 ÷ 9 = 12; 9 x 12 = 108**

3. **63 ÷ 7 = 9; 7 x 9 = 63; 63 ÷ 9 = 7; 9 x 7 = 63**

4. **99 ÷ 11 = 9; 11 x 9 = 99; 99 ÷ 9 = 11; 9 x 11 = 99**

5. **Fay is correct because all 2-digit multiples of 9 have a digit total of 9, for example: 18 = 2 x 9 and 1 + 8 = 9.**

6. **36 = 4 x 9; 9 x 4 = 36; 4 = 36 ÷ 9**

7. **5 x 9 = 45; 11 x 9 = 99**

8. **11 x 9 = 99; 9 x 11 = 99; 99 ÷ 9 = 11; 99 ÷ 11 = 9**