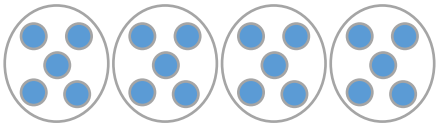
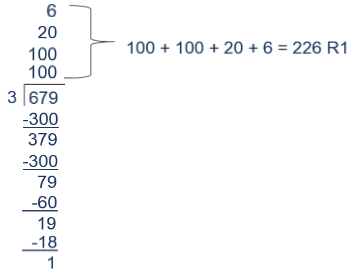
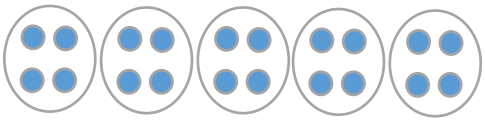
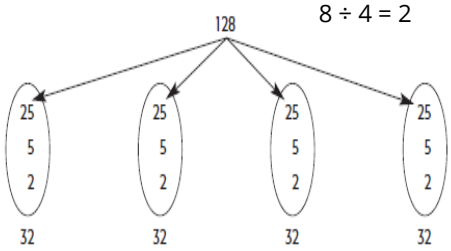
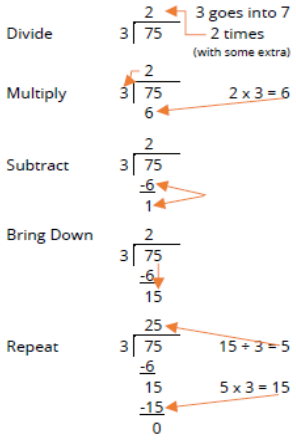
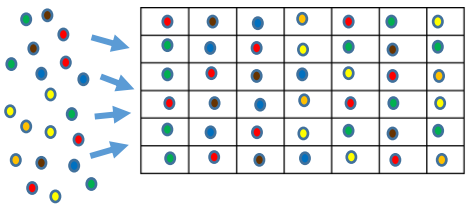
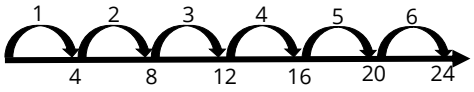
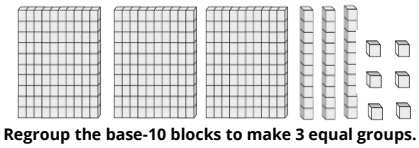
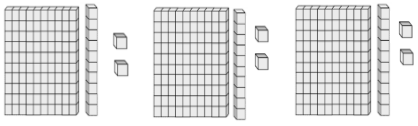
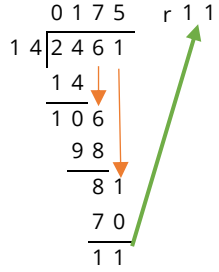
# Division Strategy Examples

| Concrete: Direct Modeling Examples | Representational: Invented Strategies Examples | Abstract: Standard Algorithm(s) Examples |
|---|---|---|
| **Problem:** Suzanne has 20 cookies that she wants to give to 4 friends. How many cookies will each friend recieve?<br>**Solution Path:** Partitive Division<br>Equal groups known<br>  | **Problem:** 176 ÷ 25 = ?<br>**Solution Path:** Repeated Subtraction<br>Find the quotient: 176 ÷ 25<br>176 – 25 = 151<br>151 – 25 = 126<br>126 – 25 = 101<br>101 – 25 = 76<br>76 – 25 = 51<br>51 – 25 = 26<br>26 – 25 = 1<br>There are 7 groups of 25 within 176 with 1 remainder.<br>Thus, 176 ÷25 =7 R1 | **Problem:** 679 ÷ 3 = ?<br>**Solution Path:** Partial Quotients/ Chunking<br>  |
| **Problem:** Suzanne has 20 cookies to give some friends. She wants to give them 4 cookies each. How many friends (not including herself) can she give 4 cookies?<br>**Solution Path:** Quotative Division<br>Equal objects in each group is known<br>  | **Problem:** Divide 128 by 4.<br>**Solution Path:** Decomposition-Place Value Strategy<br>128 ÷ 4<br>128 = 100 + 20 + 8<br>100 ÷ 4 = 25<br>20 ÷ 4 = 5<br>8 ÷ 4 = 2<br>  | **Problem:** 75 ÷ 3 = ?<br>**Solution Path:** Standard Algorithm<br>  |
| **Problem:** Janice has 42 pieces of candy. She arranges them in a box with 7 pieces of candy per row. How many rows of candy will be in each box?<br>**Solution Path:** Array Model<br>  | **Problem:** 24 ÷ 4 = ?<br>**Solution Path:** Skip Counting<br>How many times do you have to count by 4 to reach 24?<br>  <br>If you skip-count by 4 six times, you will get 24, so 24 ÷ 4 = 6. | **Problem:** 2452 ÷ 12 = ?<br>**Solution Path:** Partial Quotient Algorithm<br>2452 ÷ 12 = 204 r4<br>Version #1<br>204 r4<br>12 \| 2452<br>200<br>- 2400<br>52<br>4<br>- 48<br>4<br>Version #2<br>204 r4<br>12 \| 2452<br>100<br>- 1200<br>1252<br>100<br>- 1200<br>52<br>4<br>- 48<br>4 |
| **Problem:** 336 ÷ 3 = ?<br>**Solution Path**: Base-Ten Blocks<br>**Represent 336 using base-ten blocks.**<br>  <br>**Regroup the base-10 blocks to make 3 equal groups.**<br>  | **Problem:** 1554 ÷ 6 = ?<br>**Solution Path:** Partial Quotient-Distributive Property<br>(1200 ÷ 6) + (300 ÷ 6) + (54 ÷ 6) = ?<br>200 + 50 + 9 = 259<br>1554<br>- 1200<br>354<br>- 300<br>54<br>- 54<br>0 | **Problem:** 2461 ÷ 14 = ?<br>**Solution Path:** Standard Algorithm with a leading zero<br>  |

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