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| **GRADE 5: COMMON MULTIPLICATION AND DIVISION PROBLEM TYPES** | | | |
| Equal Group Problems | | | |
| Whole Unknown  (Multiplication) | Size of Groups Unknown  (Partitive Division) | | Number of Groups Unknown  (Measurement Division) |
| There are 25 boxes of crayons. Each box contains 96 crayons. How many crayons are there in all? | If 2,400 crayons are divided equally among 25 tubs, how many crayons will go into each tub? | | If 2,400 crayons are placed into tubs with each tub containing 96 crayons, how many tubs can be filled? |
| Multiplicative Comparison Problems | | | |
| Result Unknown | Start Unknown | | Comparison Factor Unknown |
| Tyrone traveled 125 miles last month. Jasmine traveled 15 times as many miles as Tyrone during the same month. How many miles did Jasmine travel? | Jasmine traveled 1,956 miles last summer. She traveled 12 times as many miles as Tyrone during the same summer. How many miles did Tyrone travel? | | Jasmine traveled 1,275 miles in December. Tyrone traveled 85 miles in December. Jasmine travelled how many times more miles than Tyrone? |
| Array or Area Problems | | | |
| Whole Unknown | | One Dimension Unknown | |
| There are 28 sections of parking lot at the stadium. There are 115 cars parked in each section of the parking lot at the stadium. How many cars are parked at the stadium all together?  Mr. Myers’s barn measures 35 feet by 110 feet. How many square feet are in the barn? | | There are 3,220 cars parked at the stadium. The cars are divided evenly among each of the 28 sections of parking lot. How many cars are parked in each section?  There are 3,220 cars parked at the stadium. There are exactly 115 cars parked in each section. How many sections are filled with cars?  Mr. Myers’ barn covers 3,850 square feet. The width of the barn is 35 feet. What is the length of the barn? | |
| COMBINATION PROBLEMS | | | |
| Outcomes Unknown | | Factor Unknown | |
| An experiment involves tossing a coin and rolling a die. How many different outcomes are possible?  Kelly has 2 pairs of pants and 3 shirts that can all be worn together. How many different outfits consisting of a pair of pants and a shirt does she have? | | Mike bought some new shorts and shirts that can all be worn together. He has a total of 12 different outfits. If he bought 3 pairs of shorts, how many shirts did he buy? | |

VDOE 2016 Mathematics Standards of Learning Curriculum Framework: Grade 5.