## Discussion Problems

## Step 1: Comparing Statements

## National Curriculum Objectives:

Mathematics Year 3: (3C6) Recall and use multiplication and division facts for the 3,4 and 8 multiplication tables
Mathematics Year 3: (3C7) Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

## About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

## More Year 3 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

## Comparing Statements

1. Use the digit cards to complete the comparison statement below. You can use each card more than once.

## 

$\square \times \square \times \square \pm \square \square \square$

Explore different possibilities.
2. Play this board game with partner.

- Both players roll a dice and work out the calculation that they each land on.
- If your answer is > your partner's, roll the dice again.
- If your answer is < your partner's, move back one step.
- If the answers are equal, both players roll again.

| Start | $88 \div 8$ | $9 \times 5$ | $4+4+4+4$ | $6 \times 2+4 \times 8$ |
| :---: | :---: | :---: | :---: | :---: |
| $7 \times 2+6 \times 3$ | $3+3+3$ | $5 \times 4$ | $48 \div 4$ | $7 \times 3$ |
| $24 \div 3$ | $8 \times 2$ | $5 \times 3+9 \times 4$ | $6 \times 8$ | $5+5+5+5$ |
| $8 \times 3$ | $9 \times 4+3 \times 8$ | $8+8+8+8$ | $12 \times 5$ | $24 \div 2$ |
| $2+2+2+2$ | $12 \times 8$ | $28 \div 4$ | $6 \times 3+9 \times 2$ | Finish |

## Comparing Statements

1. Use the digit cards to complete the comparison statement below. You can use each card more than once.


Various answers, for example:

# $9 \times 4>2 \times 8>4 \mid 8 \div 8$ 

Explore different possibilities.
2. Play this board game with partner.

- Both players roll a dice and work out the calculation that they each land on.
- If your answer is > your partner's, roll the dice again.
- If your answer is < your partner's, move back one step.
- If the answers are equal, both players roll again.

| Start | $\begin{gathered} 88 \div 8 \\ 11 \end{gathered}$ | $\begin{gathered} 9 \times 5 \\ 45 \end{gathered}$ | $\begin{gathered} 4+4+4+4 \\ 16 \end{gathered}$ | $\begin{gathered} 6 \times 2+4 \times 8 \\ 44 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 7 \times 2+6 \times 3 \\ 7 \\ 72 \end{gathered}$ | $\begin{gathered} 3+3+3 \\ 9 \end{gathered}$ | $\begin{gathered} 5 \times 4 \\ 20 \end{gathered}$ | $\begin{gathered} 48 \div 4 \\ 12 \end{gathered}$ | $7 \times 3$ 21 |
| $\begin{gathered} 24 \div 3 \\ 8 \end{gathered}$ | $\begin{gathered} 8 \times 2 \\ 16 \end{gathered}$ | $\begin{gathered} 5 \times 3+9 \times 4 \\ 51 \end{gathered}$ | $\begin{gathered} 6 \times 8 \\ 48 \end{gathered}$ | $\begin{gathered} 5+5+5+5 \\ 20 \end{gathered}$ |
| $\begin{gathered} 8 \times 3 \\ \quad 24 \end{gathered}$ | $\begin{gathered} 9 \times 4+3 \times 8 \\ 60 \end{gathered}$ | $\begin{gathered} 8+8+8+8 \\ 32 \end{gathered}$ | $\begin{gathered} 12 \times 5 \\ 60 \end{gathered}$ | $\begin{gathered} 24 \div 2 \\ 12 \end{gathered}$ |
| $\begin{gathered} 2+2+2+2 \\ 8 \end{gathered}$ | $\begin{gathered} 12 \times 8 \\ 96 \end{gathered}$ | $28 \div 4$ | $\begin{gathered} 6 \times 3+9 \times 2 \\ 36 \end{gathered}$ | Finish |

