

# FACTORS, MULTIPLES, PRIMES & SQUARES Dig1t<sup>®</sup> games

TO PLAY THIS GAME YOU NEED:

2 x

2 x

Score Sheet

**AIM:** To achieve the highest score.

**HOW TO PLAY:** Create a score sheet on a separate sheet of paper and decide on a score greater than 20 for players to start with. Decide whether to play on each grid individually or more than one grid at the same time. Take turns to join 2 dots (vertically or horizontally) on the grids in order to make boxes around the numbers. When your line completes a box around a number that obeys the rule of the grid, add it to your score. If the number does not obey the rule then you must subtract it from your score. The game continues until all numbers are boxed.

GRID 1 RULE: **FACTORS OF 48**

1	3	2	4
7	6	8	9
14	16	18	22
48	24	12	10

GRID 2 RULE: **MULTIPLES OF 7**

1	49	35	14
7	32	21	82
27	28	48	56
64	77	54	98

You will have to draw some lines in before you are able to complete boxes and start scoring.



GRID 3 RULE: **PRIME NUMBERS**

1	3	2	4
13	11	7	15
19	9	21	17
37	39	29	5

GRID 4 RULE: **SQUARE NUMBERS**

1	25	36	14
2	22	8	16
49	56	64	4
81	9	50	18

Dig's Questions:

1.

How many factors do all prime numbers have?

2.

Is the number 1 a prime number? Explain your answer.



Challenge:

50 monkeys are locked in 50 cages numbered 1 to 50.  
Keeper 1 unlocks all the cages.  
Keeper 2 turns the key to cage nos. 2,4,6...50.  
Keeper 3 turns the key to cage nos. 3,6,9...48.  
This continues until Keeper 50 turns the key to cage no. 50.  
Which cages are unlocked and why?

Dig's Tips:

"In the challenge, there are 50 keepers that turn the keys of their multiples. This might lock or unlock the cages depending on how many keepers have turned the key beforehand. You need to find a way to record the number of keepers that visit each cage and then work out if the cage is unlocked."



## Years 1 to 6 - Maths Activities & Games

Over 400 curriculum-aligned maths games providing an engaging and fun way for children to practise the maths skills learned in class

- Supporting **every Number target** in Year 1 to 6
- **Easily incorporated** into existing lesson plans
- Game format enables children to play with maths **together**
- Use in class or as home-learning exercises
- Available in year-group, key stage, and individual topic packs



## Times Tables & Division Activities & Assessments

*Downloadable PDF resource!*

A comprehensive and engaging system of games and assessments that steadily progress children through the times-tables.

- Incorporates division alongside multiplication activities
- Regularly refers to previously completed tables in order to constantly refresh knowledge
- Assessments and Progress trackers are included
- A resource that families can also access!



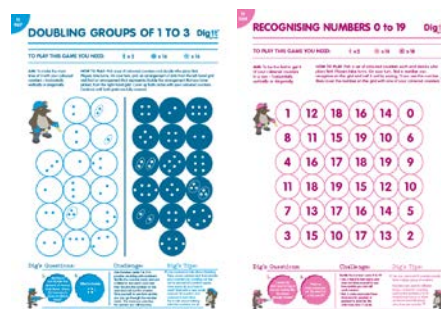
## Reception Games & Activities

*Downloadable PDF resource!*

Helping Reception teachers make children's introduction to maths an enjoyable and fun experience.

Focusing on:

- Number recognition
- Counting & estimating
- Simple addition & subtraction
- Number bonds



## Dig1t Deals - Metrics card game (age: 7+)

A card game that requires players to convert different units of measurement as well as practising children's multiplication and division skills.

Measurements include decimals and fractions!

- **Length:** Millimetres (mm), centimetres (cm) and metres (m)
- **Weight:** Kilograms (kg) and grams (g)
- **Capacity:** Millilitres (ml) and litres (l)





## **Free maths activity ideas** (Reception to Year 4)

**Downloadable PDF resource!**

These handy documents are packed full with ideas of games that can be played with just counters, dice and number cards.

Simple ideas played with simple resources that help to strengthen children's understanding of the foundational number concepts learned at school – and free to download and use!



## **Free Firework Activity Sheets**

**Downloadable PDF resource!**

Eight downloadable maths activities for fireworks season!

- Investigate different solutions to a series of challenges.
- Using all the operations to discover and explore number patterns
- Deepens children's understanding of numbers.
- A template of number-circles is available so that children can quickly move the numbers to solve the challenges



## **Christmas Maths Activities**

**Downloadable PDF resource!**

The activities encourage children to use dice, number and shape skills to complete Christmas-themed pictures.

The six activities will involve:

- Recognising numbers and dice formations.
- Recognising and naming 2D shapes.
- Recognising and naming quadrilaterals, polygons and different types of triangles.
- Addition and multiplication.



**Number Cards template** A PDF file for printing your own 0 to 20 number cards onto A4 card.

## **Number lines & Number Circles**

**Lines:** 0 to 10, 0 to 20, 0 to 5 (including  $\frac{1}{2}$ 's), 0 to 5 (including 0.5's), blank number lines

**Circles:** 0 to 9 – for use with our Firework activity sheets.

**Score sheets** To note down your scores as you play.