 Publications

## K - 2 Maths

## Space Activities

# A practical resource for teachers of junior primary classes. 

## Provides students with written activities to help develop and enhance their use of early spatial mathematical skills and strategies.

## Contents

Introduction ..... 2
Links to Student Outcome Statements ..... 4
Skills Checklist ..... 6
Teaching Notes ..... 7
Activity Pages Maths Concept
Shape Construction
What Shape Am I ?
What Shape Am I ?
What Object Am I ?
What Object Am I ?
Grouping Shapes
Grouping Shapes
Grouping Objects
Grouping Objects
Cut It / Place It
Closed and Open Shapes
Design and Create (Regular Shapes)
2D Shapes ..... 10
2D Shapes ..... 11
2D Shapes ..... 12
3D Objects ..... 13
3D Objects ..... 14
2D Shapes ..... 15
2D Shapes ..... 16
3D Objects ..... 17
3D Objects ..... 18
2D Shapes ..... 19
2D Shapes ..... 20
2D Shapes ..... 21
Design and Create (Irregular Shapes) 2D Shapes ..... 22
Shadow Shapes2D Shapes23
More Shadow Shapes 2D Shapes ..... 24
Sea Shapes
Symmetrical Designs
2D Shapes ..... 25
2D Shapes ..... 26
All Flipped Out!
Space - The Final Frontier2D Shapes27Lost and FoundPosition28
Position ..... 29
Barrier Game Position ..... 30Look / Cover / Draw / Check
2D Shapes / Position ..... 31
Cut It Up
2D Shapes ..... 32
Word Path Position ..... 33
Garbage Dump Position ..... 34
Colour in Grid Position ..... 35
Grid and Draw It Position ..... 36
Digging for Diamonds 2D Shapes / Position ..... 37
Overlapping Shapes 2D Shapes ..... 38
Regular and Irregular Shapes 2D Shapes ..... 39
All Squared 2D Shapes / Position ..... 40
Shape Matrix 2D Shapes ..... 41
Object Matrix 3D Objects ..... 42
Board Game ..... 43
Board Game Question Cards ..... 44
Features of 3 Dimensional Objects 3D Objects ..... 45
Challenge Page ..... 46
Answers ..... 47

## What Shape Am I?

Read the clues below to work out the answer. Remember to read all of the clues.

1. I have four corners.

I have two short sides
opposite each other.
I have two long sides opposite each other.

I am a $\qquad$
3. My sides are straight lines. I have three sides.
I have three pointy corners.

I am a $\qquad$
5. I have four straight sides.

I have four corners.
All my sides are the same length.
l am a $\qquad$

## \& Do Your Own

a) I have $\qquad$
b) I have $\qquad$
c) I have

I am the shape

## What Object Am I?

Read the clues below to work out the answer. Remember to read all the clues. Draw a picture of each object underneath.

1. I have no edges.

I have no corners.
I am round.
I am a solid object.
I am a $\qquad$
$\square$
3. I have one flat face.

I have one pointy corner.
My body is curved.
I can slide and roll.
I am a $\qquad$
$\square$
2. I am a solid object.

I have six flat faces.
I have pointy corners. I slide but I do not roll.

I am a $\qquad$
4. I have two flat faces.

My faces are circles.
My body is curved.
I have no pointy corners.
I am a $\qquad$
$-\mathrm{Cl}_{1 / \prime}^{\prime \prime}-\mathbf{T H I N K}$ ABOUT IT
1 - What object was the easiest to draw? Why?

- Which object was the hardest to draw? Why?
$\qquad$ Date: $\qquad$


## Grouping Objects

is Look at the objects in the box below. Talk about them with the other people in your group. What do they look like? What features do they have? How are they similar or different to each other? In the spaces provided, group these objects in different ways.

## Object Box



In the space below, sort or group the objects.
$\square$
Now sort or group the same objects in a different way.
$\square$

I - What was the most unusual object in the group? Why?

- Did your friend group the objects the same way you did? Why or why not?


## Closed and Open Shapes

is Below is a picture. Look at it carefully. Using the table at the bottom of the page, tally how many closed shapes and how many open shapes you can see.


## Tally:

| Closed Shapes |  |
| :--- | :--- |
| Open Shapes |  |



## THINK ABOUT IT

- How many closed shapes did you find? Is this the same as your friend? Why or why not? $\qquad$
- How many open shapes did you find? Is this the same as your friend? Why or why not? $\qquad$
- How did you keep track of the shapes you had found so that you didn't count them twice?
$\qquad$ Date:


## Lost and Found

is You are a new astronaut at NASA. You cannot find your way to the space ship that is ready to take off. Follow the directions and draw the path on the map below.


## Directions:

Start at the top left hand corner of the map. Travel down the path until you get to where the path splits in two. Do not take the bend, keep travelling forward - straight ahead until you get to the fuel depot where you will turn left. Follow the path as it bends to the left. Go behind the radar and keep walking until you can see the medical centre. Turn around completely to your right and follow the new path in front of the radar. You will get to a fork in the path. Take the path on your right and it will take you to your rocket ship ready for blast off.


THINK ABOUT IT
I. Were the instructions easy to follow? Why or why not?

- How could they have been improved?
- On the back of this page, write your own directions to take the astronaut to the flight centre. Get a friend to follow the directions.

