

# OAA LESSON 5

# YEAR 5

Learning Intention: *How can you read a 4-figure grid references on an OS map?*

I know that OS maps are labelled with grid references.

I can read 4-figure grid references.

I can follow a trail of 4-figure grid references to an end point.

EQUIPMENT:

OS map of local area

Maps of school

Activity cards

**Read the map and Activity 1 for preparation before the lesson.**

## Starter: Read the map

Recap children's knowledge of co-ordinates- **linking learning** what they did in year 4.

Show children an example of an OS map (**Resource 1**). Q&A: Do they know what OS Map stands for? **Ordnance Survey Map**

Ask children what they notice about the map.

Discuss with the children some of the features of OS maps; it may be useful to focus on a few aspects of the key.

Focus on the grid references. Grid references are like the co-ordinates the children looked at in Year 3 and 4. What do the children notice?

Each horizontal and vertical line is labelled with 2 digits rather than 1, this means the co-ordinate is made up of 4 digits. This is called a **4 figure grid reference**.

Reading a grid reference from a map is the same process as reading co-ordinates from a grid. Look at the OS map, what is the grid reference for the school? Remember to read the grid reference, horizontal first, then vertical. **A way to remember...**

### **Along the corridor (horizontal) then go up the stairs (vertical)**

Look again at the example OS map.

What is the Grid Reference at Lego-land

Look first at the numbers horizontally (**along the corridor**) - 93 marks the beginning of the square that Lego-land is in.

Now look at the numbers going vertically (**Up the stairs**) - 74 marks the bottom of the square containing Lego-land.

These 2 numbers give you the **4 figure grid reference** for Lego-land - 93,74. (See Resource 2 for more support with this).

Now try looking at an OS map of your local area (these can be accessed via Bing maps). What is the grid reference of your school? What about other places in your local area?

Resource card 1



Resource card 2

Example OS Map - Teacher Prompt

Vertical numbers - read these second

Square containing Legoland



Horizontal numbers - read these first

**WARM UP: Work it out!** Teacher to put children into groups of 3/4

Children to skip, jog, run, around in an area.

As soon as the teacher calls a maths question, the children are to create the answer using their bodies. E.g.  $6 \times 8 = 48$  – the children are to make the 4 and the 8 with their bodies, either by lying on the floor or standing.

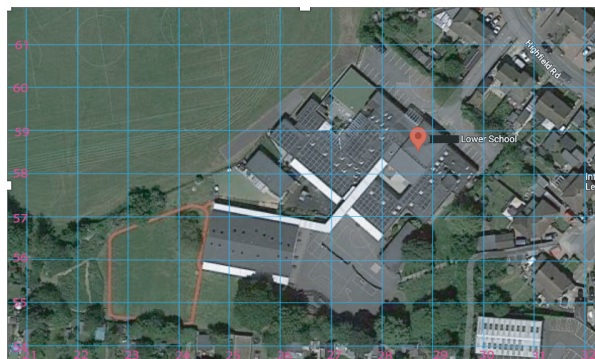
Each time go back to jogging, jumping or skipping - to ensure the children have had a good pulse raiser.

**Make it harder:** Make up some **co-ordinate numbers** which make up a **4 figure reference**- in 4's children have to get into a line and make up the number. **Linking learning**

## ACTIVITY 1: Treasure Hunt

Before the lesson, **prepare a plan of the school grounds** or an area of the school grounds depending on what is most suitable.

Overlay an OS style grid and label the grid-line as on an OS map. **See example (resource card 3)**



Example OS style map with made up grid (PPP version)  
See resource card 3.

**You could use the PPP grid overlay to (see resource card 4).**

This activity could be completed in groups of 4. Provide children with a copy of the plan of the area and 10 grid references **(see resource card 5; you can add yours to this)** which they must follow in order to find the “treasure.”

Start the children at different co-ordinates- so they are not all following each other.

At each set of grid references they successfully find, there should be an activity for them to complete, such as:

**Point 1:** 30 x Star jumps

**Point 2:** 30 x Spotty dogs

**Point 3:** 10 x Burpees

**Point 4:** 30 x High knees

**Point 5:** Run on the spot for 1 minute

**Point 6:** Hold a plank position for 20 seconds

**Point 7:** Balance on 1 leg for 1 minute then swap over and repeat with the other leg

**Point 8:** Skater hops x 30 hopping from one leg to the other

**Point 9:** 50 x jab cross (punching out in front)

**Point 10:** Sprint on the spot for 30 seconds

When children have successfully completed the trail in the correct order, they can then be rewarded with treasure.

**Make it harder:** Children to create their own trail using 4 figure grid references

### Resource card 5

#### Treasure Hunt

Read the co-ordinates on your map and find the activity:

- Grid reference 1
- Grid reference 2
- Grid reference 3
- Grid reference 4
- Grid reference 5
- Grid reference 6
- Grid reference 7
- Grid reference 8
- Grid reference 9
- Grid reference 10

## PLENARY

**Plenary:** When do you think it might be necessary to follow a trail of co-ordinates? Why is it important to know the co-ordinates of your location? Did you enjoy today's lesson?