



**Overview**

The pod starts with a game that demonstrates the need for careful planning and collaboration. Teams are given feedback by a recorder who helps them understand the dynamics of the team. As a result they construct a standard operating procedure that enables them to improve their performance.

Pupils are also introduced to their Games learning log, which they use to reflect on their learning throughout the project.

**Introduction**

I = Information retrieval      C = Communication  
 T = Teamwork                    M = Modelling  
 P = Planning

Lesson	Activity	Learning outcomes	Learning skills	Code
1 Teamwork	<p><b>1.1</b> Airball challenge</p> <p><b>1.2</b> Agreeing a standard operating procedure</p>	<p>Improve performance in a task through improved communication and cooperation.</p> <p>Develop a standard operating procedure.</p>	Reflect on learning.	P, C



### Overview

Success in the *Games* project will depend on how effectively groups of pupils work together as teams. In this introductory lesson, pupils are introduced to a simple game that involves close cooperation and good communication skills. They use feedback from a trial run to help them establish a standard operating procedure. They then evaluate their success after playing the game again.

### Lesson plan

1. Introduction (10 mins)
2. Activity 1.1 Airball challenge (10 mins)
3. Activity 1.2 Agreeing a standard operating procedure (25 mins)
4. Plenary (10 mins)
5. Introduction to the topic structure (5 mins)

### Learning skills

- Reflect on learning. (P)

### Learning outcomes

Pupils will be able to:

- Improve performance in a task through improved communication and cooperation.
- Develop a standard operating procedure.

### Resources

- *Games* learning log
- Activity sheet 1.1 Airball challenge
- Activity sheet 1.2 Agreeing a standard operating procedure (cards)

### Equipment and materials

- Ball of string or thin rope
- Scissors
- Two empty cardboard tubes with one end closed, for example crisps tubes
- Some marbles or small balls or beads that fit into the tubes
- Blu-Tack
- Metre rule

### Health and safety

Carry out your own risk assessment and take suitable precautions.

To minimise the risk of injury from moving objects and tripping over there must be sufficient unobstructed space for pupils to carry out these tasks.

### Introduction (10 mins)

#### Procedure

**a** Explain to pupils that they are going to be involved in a STEM project about games. The project culminates in pupils working together to produce a new game with its own equipment, rules and scoring. Show pupils the overview on the final presentation slide. Explain that they will start by exploring the importance of good teamwork.

### Activity 1.1 Airball challenge (10 mins)

#### Procedure

**a** Use the two slides of the rules and basic set-up to explain the airball challenge.

**b** Divide the class into groups of five. Each group needs four guides and one recorder. Show the guides the principle of how to assemble the equipment but do not show them where to attach the strings or where to stand.

**c** Give the recorder Activity sheet 1.1 Airball challenge. Explain it will be his or her job to record the communications between members of the team for the next five minutes. The recorder should also judge whether the group is sticking to the rules of the game, for example not touching the tubes when within 2m of the goal tube.



**d** Tell the teams that, on your command, they need to construct the apparatus in a way that allows them to deposit as many balls as possible from the carrier tube into the goal tube in five minutes.

**e** Give the command and allow teams their first attempts at the game. Do not offer any assistance but make sure the recorder is noting the communication details on the sheet.

**f** After five minutes stop the groups. Take quick feedback on the difficulty of the task.

**g** Get the recorders to give feedback to each member of the group based on their evidence. Stress that this needs to be done with clarity and sensitivity.

### Activity 1.2 Agreeing a standard operating procedure (25 mins)

#### Procedure

**a** Tell pupils to use the feedback from their recorder to agree a standard operating procedure. Give the groups their cards from Activity sheet 1.2 Agreeing a standard operating procedure. They should select the important instructions and discard those that are not important. They can add more of their own. They should put the cards in order to create their standard operating procedure.

**b** Give the pupils 15 minutes to plan their next attempt using their standard operating procedure. You may need to use the 'rules' slide to remind pupils of the rules of the game, but don't show the solution slide unless groups are really stuck. Try to give hints rather than provide the complete solution.

**c** Tell pupils they now have five minutes to carry as many balls as they can to the goal.

#### Plenary (10 mins)

Take feedback on the effectiveness of the team second time round. Why have they been so much more successful? What aspects of the standard operating procedure were most successful?

You could use the slide showing the suggested set-up to discuss how teams approached the challenge.

Ask pupils how this game could be altered to make it easier or more difficult. Could it be made more interesting? How could a league system be devised? Explain that later lessons will explore some of these issues in more detail.

### Introduction to the topic structure (5 mins)

**a** Show pupils the slide of the *Games* topic structure.

**b** Show pupils their *Games* learning log and explain that they will use it to record their learning throughout the pod.

#### Rules of airball

At its simplest, imagine the goal tube being in the centre of a clock face.

Three team members are positioned at, say, 12, 4 and 8 o'clock, each holding a string connected to the top of the carrier tube. The fourth team member is at 6 o'clock holding a string connected to the bottom tube to enable the tipping.

The ball is placed in the carrier tube, say by the team member at 12 o'clock. At this time no one can move from his or her position. The people at 4 and 8 take up the slack while the 12 o'clock string is kept tight. This allows the tube to be lifted.

While 4 and 8 pull the tube towards the clock face centre (goal tube), 12 plays out, keeping a tight string.

When the tube is in the correct position for tipping, 6 can pull, while the other three strings stay tight to keep the tube's position, or adjust as necessary.