

# Problem Solving

## *Pipeline Challenge*

### Instruction sheet

#### Guidelines for Taking a Problem Solving Session:

**Aim:** This is a group problem solving and communication exercise. This activity involves moving balls down lengths of half pipes or gutters.

#### **Materials**

- Ball
- Half pipes
- Bucket

#### **Instructions**

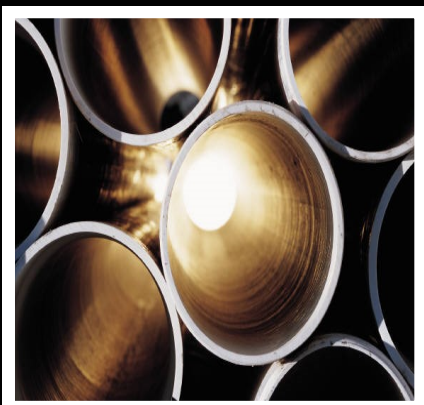
- Group must work together to control a ball down lengths of half pipes.
- Give the group the pipes and the ball
- Have a start point and a finish point (*a bucket will be provided for the finish line*)
- Every person must carry the ball at least once.

#### **Variations on the task**

- Challenge the group to see how fast they can get the ball through the obstacle course
- Get the participants to take turns in a certain order
- Complete the task in silence
- Do the task on one foot

#### **Important Notes**

- As a facilitator you can control how hard or easy to make this task. You can take them over obstacles - downstairs and around trees etc.
- Allow the group several attempts if you have the time and motivation
- This task can be done indoors or outdoors.



# Problem Solving

## *Crossing the River*

### Instruction sheet

#### Guidelines for Taking a Problem Solving Session:

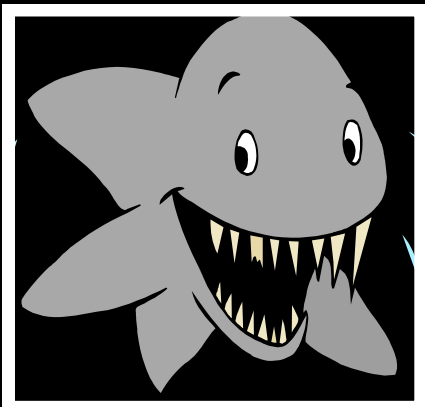
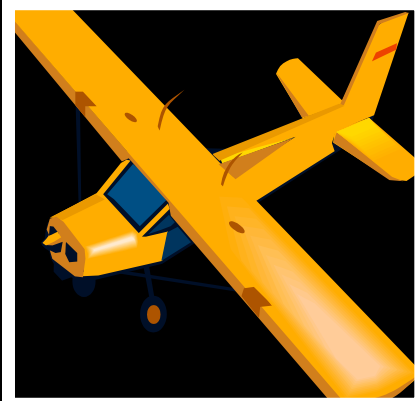
**Aim:** To get the whole team across the river

#### **Materials**

- 6 carpet squares (or half the group number)

#### **Instructions**

- Establish the two river banks (about 10-20 metres away)
- The aim is to get from one river bank to the other river bank only standing on the carpet squares.
- You may only go into the river if you are standing on a carpet square
- If anyone touches the water the whole team must start again
- You must never let go of a carpet square, if you do it is swept away by the river (keep an eye on when they place the squares on the ground, they are likely to let go before they step on the carpet)
- The challenge is finished only when all the members are on the riverbank!



# Problem Solving

## *Toxic Pyramid*

### Instruction sheet

#### Guidelines for Taking a Problem Solving Session:

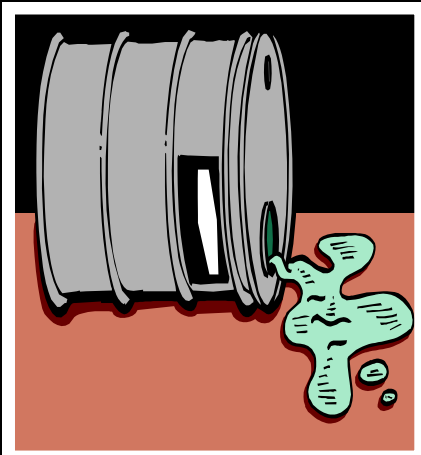
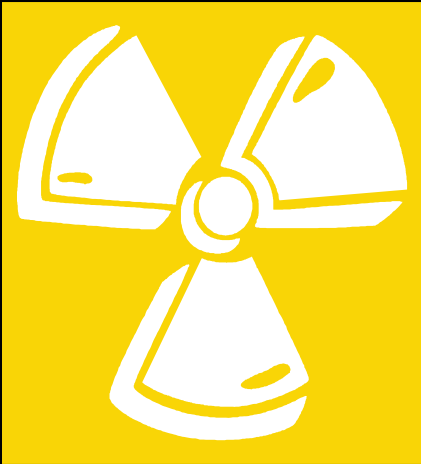
**Aim:** To build a pyramid

#### **Materials**

- 10 pieces of pipe
- A rope to mark off the contaminated area
- A set of ropes attached to an elastic band

#### **Instructions**

- Mark out a large area (*3m in diameter, using rope*) and declare it a *danger zone*. If anyone enters that area they will immediately dissolve (*be removed from the game for a set amount of time*).
- Place the 10 pieces of pipe in the middle of the danger zone.
- Tell the group they must build a pyramid using the pieces of pipe.
- To do this without contamination, the students must stretch the ropes out until the elastic band is over a piece of pipe and then they need to put it into position.
- They will have to do this 10 times until the pyramid is complete
- Not all pieces of pipe need to be upright to start off with, the team will need to work out how to turn it around.



# Problem Solving

## *Tarp Turn*

### Instruction sheet

#### Guidelines for Taking a Problem Solving Session:

**Aim:** To turn a tarpaulin over while the group is standing on it

#### **Materials**

- Tarpaulin

#### **Instructions**

- Lay the tarpaulin on the ground and have the whole team stand on it.
- The whole team needs to turn the tarpaulin over without touching the ground.
- If someone falls off or steps onto the ground you need to start again.
- Play until the tarpaulin has been successfully turned over.

