

Bob's Building Supplies

PAPER **£10**

**PAPER
CLIP** **£3**

SELLOTAPE **£10**
(10cm strip)

NO REFUNDS!

**Only Genuine Bob's Building Products
may be used to construct your bridge!**

Building Bridges

Problem:

- A car has got to travel from one side of a canyon to another. The canyon is 40cm wide.

Task:

- The children have to make a bridge which the car can travel over.

Materials:

- Paper (£10)
- Paper clips (£3)
- Sellotape (£10 for 10cm strip)
- Scissors (free)
- Ruler (free)
- Pencils (free)
- Scrap paper (free) to practice construction techniques

Rules:

- Each table will work together to solve the problems, and their first task is to think of a name for their construction company.
- Then, the children need to make a bridge large enough (and strong enough) for a car to travel from one side of the canyon to the other.
- They may use only the materials listed above to make their bridge, and all materials should be purchased from Bob's building supplies at the prices stated. Only genuine Bob's building products are allowed to be used in the final design.
- Each table has £100 to spend, and no refunds may be given once products have been purchased.
- At particular points, special offers may be given (e.g. paper only £5 per sheet for the next 5 minutes!).
- Children MUST work as a team, planning ahead, deciding what to buy, and working out the best way of solving the problem.
- Children only have 30 minutes to create their bridges.

Judging:

- At the end of 30 minutes, children should show their bridges, and test them using the car provided. The car may not be used to test the bridge during the production time (although children may handle it to assess its size and weight).
- Points will be awarded for design, teamwork, fitness for purpose and use of materials.
- The winning team will get extra house points / prizes.

After judging, discuss the best approaches used to tackle the task. How can we change the paper to make it stronger (fold it? corrugate it? roll it?).

Children to repeat task, trying to include any good design features discussed earlier. At end, tables to show / test their new bridges, and again points / prizes will be given for the categories stated above.