Design Challenge #1

No Room to Play

The Problem
The children are trying to play indoors in their room, but there is very little space on the floor to use all their toys. The two beds take up a lot of room. The children would really like to have more space to play in.

A Design Brief
Design and make bunk beds so that the children will have more floor space.

Design Challenge #2

Wind Speed Tester

The Problem
The children are excited about flying their new kites, but they want to know if it is windy enough. They need something to show them how windy it is.

A Design Brief
Make a wind speed tester.
Design Challenge #3

A Computer Mover

The Problem
A new computer has just arrived for the classroom. But there are three very heavy pieces of equipment that have to be kept together. The teacher needs something to keep the computer on which can also be moved around the room.

A Design Brief
Make a cart, so that the entire computer can be moved around safely and easily.

Design Challenge #4

An Entertainment Machine

The Problem
With a long wait before their flight, the families are getting bored. The children have nothing to do! They’d love to build something to keep them amused.

A Design Brief
Make a pulley-operated Entertainment Machine, which will move figures or “pictures” to amuse the children.
Design Challenge #5

A Carnival Ride

The Problem
The children have made up a game about DUPLO animals and people going on a journey. In their travels, they go to a carnival. The children want to make a carnival ride which makes the animals and people go at different speeds and turn in different directions.

A Design Brief
Make a ride operated by gears, which will enable DUPLO people or animals to turn in different directions, at different speeds.