MEP Ballista Challenge
Ballista History

The word Ballista comes from the Greek word ‘Ballistes’ meaning to throw. Believed to have been invented by the Greeks and later modified by the Romans, then later adopted by the Chinese. Ballista’s have been weapons used in sieges on castles and fortresses throughout history. They are essentially a catapult.

When released, the ballista would shoot a large projectile toward the target with great accuracy.

Your Challenge: To build your own ballista and see how far you can shoot your projectile! (Can you make it hit a target?)

What you will need to make your ballista
• Sticks or Pencils or pens (I have used Sea Cadets pencils).
• Rubber bands or string / thread.
• A sheet of A5 paper.

HINT: It is probably a good idea to enlist the help of a parent or guardian or a brother or sister as building the ballista on your own can be quite tricky.

You can use my design if you wish or you can search the internet for different designs. The one thing that must be observed is the projectile can only be made from and A5 sheet of paper scrunched up into a tight ball, to make this a fair challenge everyone must use the same projectile.

Good luck and more importantly, have fun.
Step by step plan for building your ballista

Step 1
If you can use rubber bands to make the construction of your ballista easy. Start by banding two pencils together.

Step 2
Insert the single pencil between the pencils held together with the rubber bands.

Step 3
Repeat step two with another pencil.
Step by step plan for building your ballista

Step 4
Add another pair of banded pencils

Step 5
Repeat on opposite side

Step 6
Insert an ‘A’ Frame and secure
Step by step plan for building your ballista

**Step 7**
- Insert second ‘A’ frame

**Step 8**
- Secure ‘A’ frame brace

**Step 9**
- Install projector stop brace
Projector installation

Secure the projector (spoon) to the front cross brace as shown.

Secure a large rubber band to the front cross brace and attach to the projector (spoon) as shown so that it is in contact with the projector stop brace.