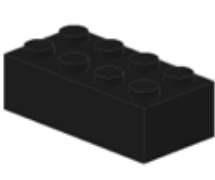
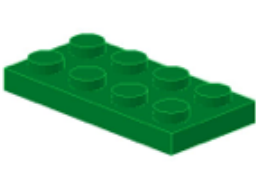

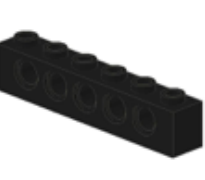



2.6C Making Strong Lego Models

It's important for students to start using LEGO and experimenting with various pieces

Students should be familiar with some common LEGO names:

brick	plate	stud	beam	pin
				

Building and Bracing

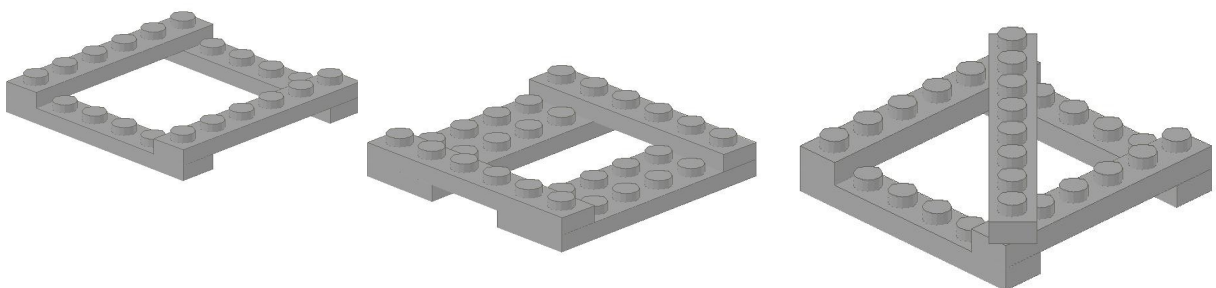
When you first start building a tower or a bridge you need a **frame**.

The frame is the strength of the building. Usually made out of wood or steel, these frames are made from a lot of thin beams joined together. Thin beams are cheaper than thick ones and by building them together, they are just as strong.

Some beams go vertical and horizontal to support the forces acting in these directions but the most important is the **brace**. These are the beams that go at an angle to stop sideways motion.



Construct the following pieces and work out which is most rigid.



Triangles are the strongest shape so when you make frames, it is best to use triangles.

Vertical Frames can be made by joining LEGO beams by using pins. The **LEGO pin** is very useful for joining Technic Beams and making them strong.

