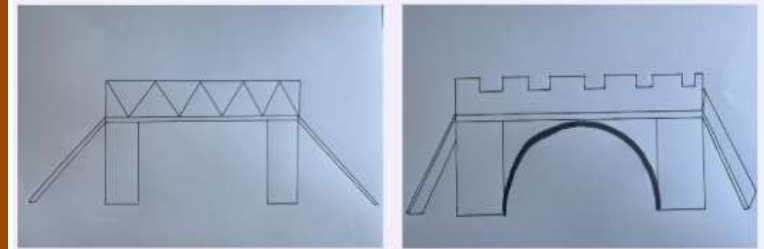


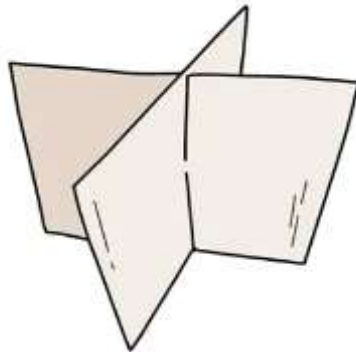
Year 1 Spring - How can I create a free-standing structure?

What I need to know by the end of this unit:

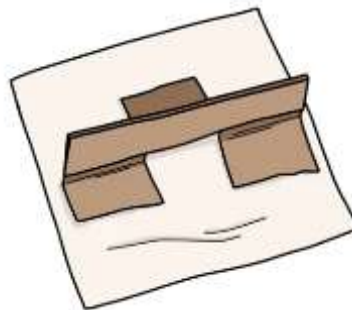
- Free-standing structures can stand on their own without being held or supported by anything else.
- There are different methods for attaching (flange, slot, tab and L-brace).
- Trusses can be added to add stability.
- These can be used to make the structure more stable.
- Drawing accurately is important when designing a product.
- Testing and evaluating are important to improve designs.



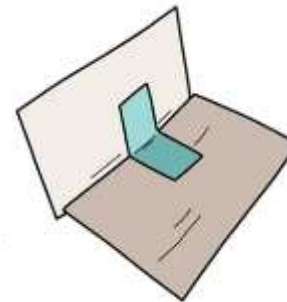
Flange



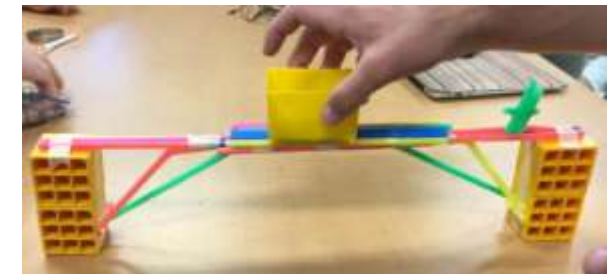
Slot



Tab



L-brace



Truss Bridge

Key Vocabulary – Top 5!

- **Stable** - something that is strong and does not fall over easily.
- **Structure** - something that is put together and holds its shape, made for a purpose.
- **Free-standing** - standing up by itself without being held.
- **Attach** - to join two things together.
- **Reinforce** - to make something stronger

