# Design Technology Year 3 /4 Cycle A—Autumn Term Pop-Up Books

## Key Vocabulary

**V-fold:** a cut in the shape of a v on the fold in the middle of a piece of card, opens like a mouth or beak.

**Box fold:** also known as parallel surfaces, made by 2 cuts that go across the fold in the middle of a piece of card. Can vary the size by changing the length of the cuts and distance between them.

Parallel surfaces: see above.

**Spring**: makes something 'spring' off a page, make a small concertina from 2 thin strips of card.

**Window flap:** a flap made in a piece of card, to hide / reveal something underneath, best made with a craft knife. Requires another piece of paper or card to be stuck behind the flap (with a picture on).

**Split pin:** an item of stationary used to join pieces of paper / card together, still slowing them to turn.

**Spinner:** made by a small piece of card being attached to the base card by a split pin, the top card is still allowed to turn / spin independently.

#### Key skills:

1. Learn the names of the pop up mechanisms.

2. Use a craft knife, green cutting board and metal rule to cut straight lines.

3. Learn at least 3 different pop up mechanisms.

4. Learn to use a hole punch (even if they don't use it in their final design)

5. Plan as a team: their page needs to be different to everyone else's.

6. Learn about key individuals and events in DT have helped shape the world. (This could be LGT)

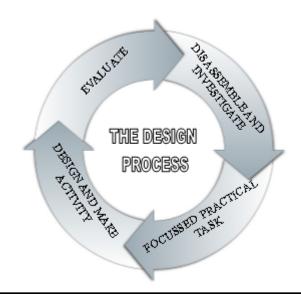


## Sources of support:

- Risk assessments in DT file
- How to use a craft knife guide in DT file







### Key activities that MUST take place

**Stage 1:** Investigate the pop up books and cards available in school, they are in one of the DT blue boxes in 3/4 wing. Please don't take them apart!

**Stage 2:** FPT: learn how to make various pop up mechanisms. Full instructions are in the same blue boxes.

**Stage 3:** DMA: design a page or two to add into a pop up book based on one of your current topics.

**Stage 4:** Critique their contribution to the book.





# Design Technology Year 3/4 Cycle A—Spring Term Pneumatic Animals

# Key Vocabulary

Balloon: a small gas-filled latex bag, used as a child's toy.

**Pneumatic**: operated by gas or air used under pressure.

Pivot: the central point on which a mechanism turns or moves.

Inflate: to fill with air or another gas.

Deflate: to remove the air or gas from something.

Squeeze: to press (usually with fingers).

**Compress:** a synonym for squeeze.

**Syringe:** a hollow tube designed for inserting or removing gas or liquid.

**Mechanism**: a system of parts that work together.

**Net:** a flat 2D shape, which when cut out will make a 3D shape.

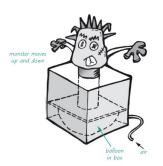
### Key skills:

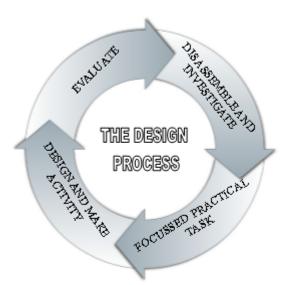
- Be able to inflate and deflate a balloon with a syringe and tubing.
- 2. Be able to make a tight seal so air can be moved around tubes / syringes.
- 3. Design a model of an animal which incorporates some pneumatics to make it move.

### Sources of support:

- In the shared area, there is a pneumatic animals guide, it is REALLY helpful.
- Also in the shared area, there is another guide called 'Move It!' all about pneumatics.







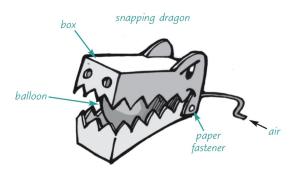
# Key activities that MUST take place

**Stage 1:** Disassemble and investigate; Using the internet, children should research pneumatic animal models.

**Stage 2:** FPT: learn how to inflate and deflate a balloon with syringes and how to make one syringe move another syringe.

**Stage 3:** DMA: design and make an animal with pneumatic moving parts (e.g. jaws, limbs)

Stage 4: evaluate.





hinged box – egg box/burger box etc. squeeze

# Design Technology Year 3 /4 Cycle A—Summer Term Bread

#### Key Vocabulary

Flour: main ingredient in bread, made from milled wheat.

Yeast: member of the fungi kingdom, used in bread making to make the dough rise.

**Dough**: made by mixing flour, water and flavourings.

**Rise:** verb meaning to move up, bread will rise as it proves and cooks.

Prove; a verb meaning to increase in size before baking.

Knead: to squeeze and stretch the dough with your hands to develop the gluten.

Grown: food which has been planted in the ground.

**Reared:** an animal which has been raised from a young before being slaughtered to produce food.

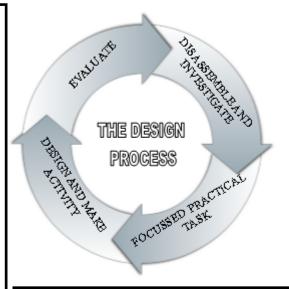
**Caught:** animals which have grown up in the wild then been caught and slaughtered to produce food.

**Processed food:** food which has had a chemical or mechanical operation performed on it, e.g. processed ham, ready meals.









#### Key activities that MUST take place

**Stage 1a;** know if food is grown, reared, caught or processed.

**Stage 1b;** Taste bread bought from a supermarket, talk about the taste, smell, texture& appearance.

**Stage 2:** FPT: learn how to make bread. (teacher demo 2 different flavours with the class helping)

**Stage 3:** DMA: design a bread recipe that will get children eating more bread.

**Stage 4:** write out their new bread recipe.

NB Anne Winter will prove and cook the two different batches for you, please talk to her well in advance.

#### Key skills:

1. Talk about what they like & dislike in terms of taste, smell, texture, appearance.

- 2. Knead dough.
- 3. Weigh with scales.
- 4. Measure with a measuring jug.
- 5. Adapt and write out a recipe.

6. Learn about some famous British cooks: Gordon Ramsey? Heston Blumenthal? (this one is important, could be LGT activities?)

#### Sources of support:

- Cooking guide in the DT subject folder
- <u>https://</u> <u>www.youtube.com/</u> <u>watch?v=BJiucv88flM</u> kneading

