

## Contents

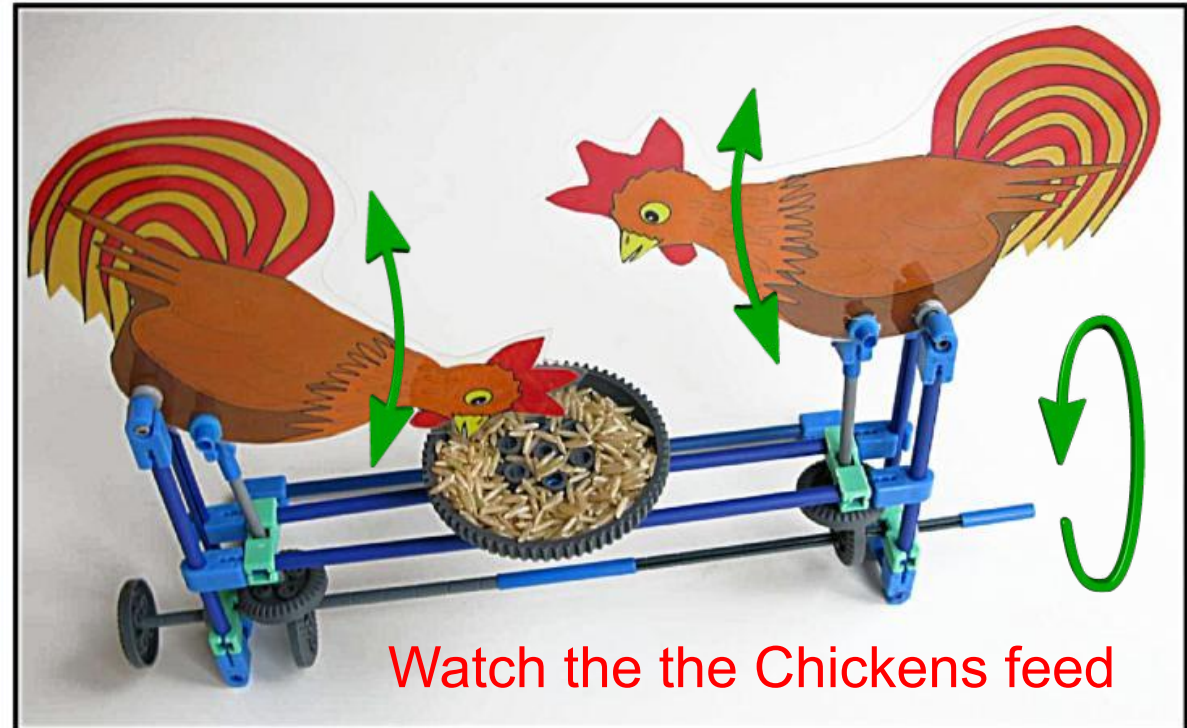
- P1 Introduction
- P2 Parts List
- P3 Making 1
- P4 Making 2
- P5 chick cutout

## Activities

- 1) Assemble the models using the instructions on following pages.
- 2) Adjust the chickens (actually cockerels) so movement is correct by adjusting the cams position.
- 3) Add chick feed into feed tray - can be glued into position

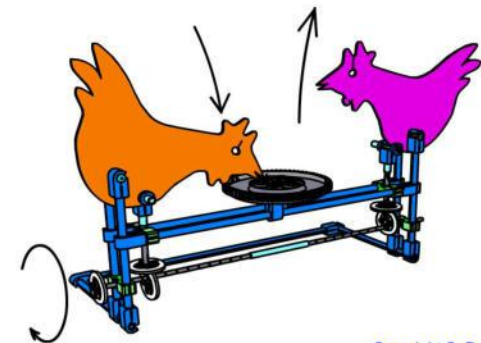
### Key Words

Cam, follower, rotary motion, axle, friction, leverage, timing sequence, reciprocal motion. pivot point

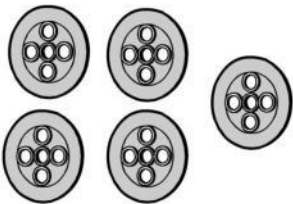
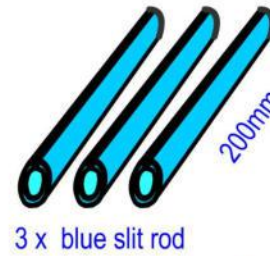
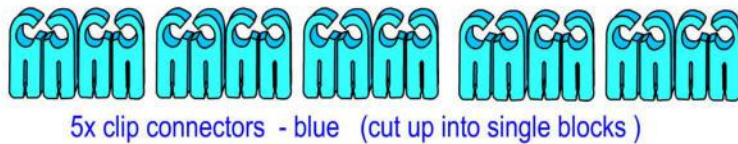
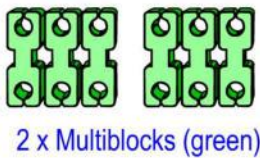


### Design Challenge

Design your own feeding birds or animals using the help on these pages to help (using cut-out template on p5 to help)



Trim any sharp edges after cutting

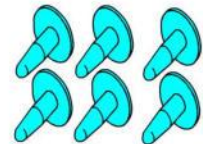
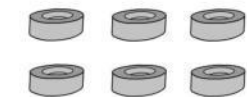


5 x 28mm cam / wheel  
(one extra can be used as a handle)

1 x 70mm gear

2 x 4mm snap rod

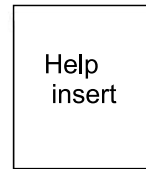
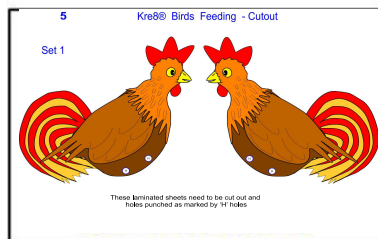
1 x 3.9mm tube  
(cut as needed)



2 x 5mm blue collars

6 x 5mm blue collars

6 x 4mm grey collar



## Tools

### Snips

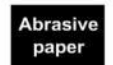
Use to cut Kre8 connector hinges, plastic sheet, light blue tubing etc

Note - Scissors are not very satisfactory as they do not have serrated blades.



### Emery Cloth

Use fine 'emery cloth' or other 'abrasive paper' to round and smooth the slit rod or blue tube ends to make assembly easier.



### Pencil and Rule

Use to mark lengths of blue tube or slit rods before cutting. Can also be used on plastic sheet before shapes are cut out.



Also needed - Roll of clear tape or similar to hold hands on.

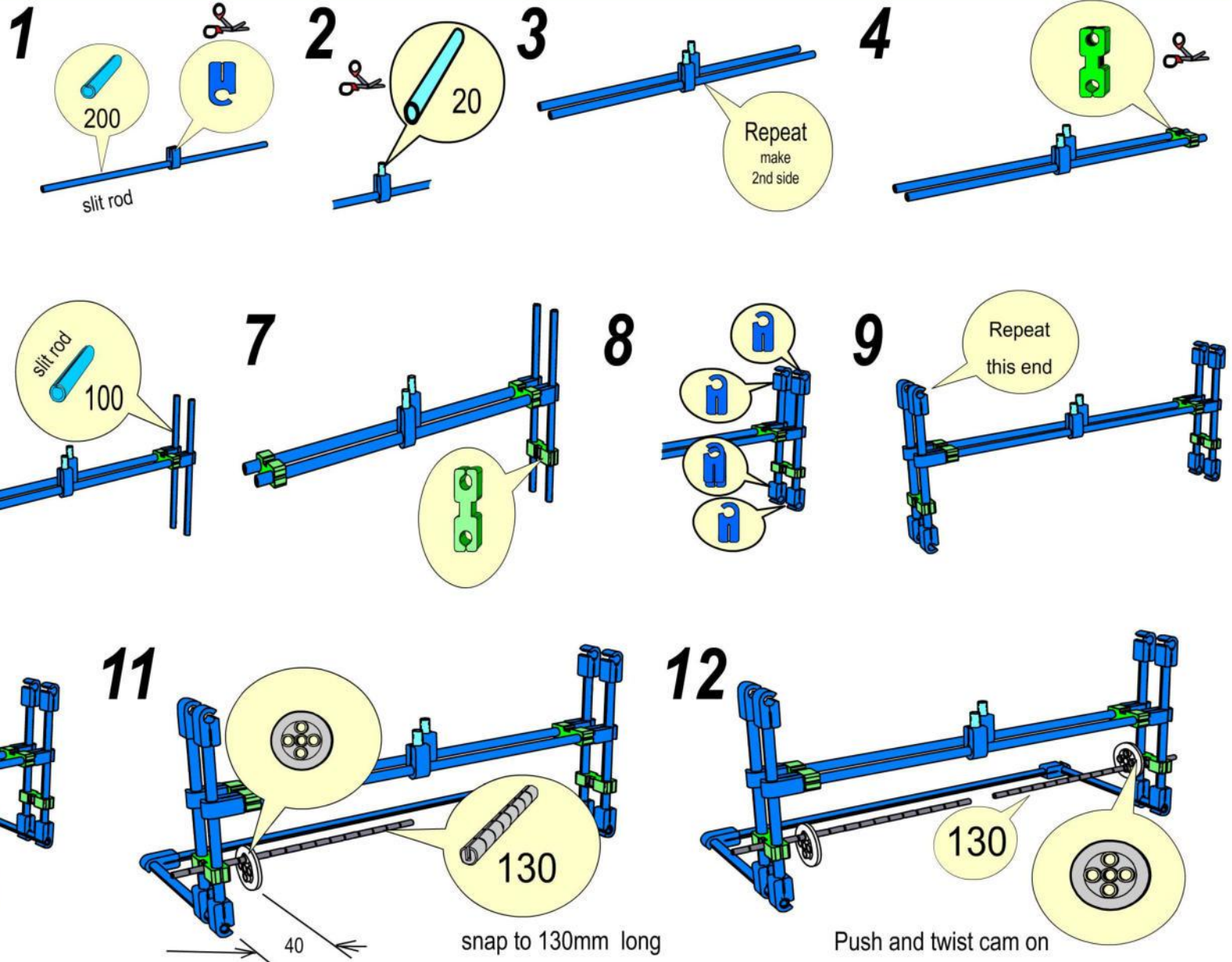
## Easy Assembly

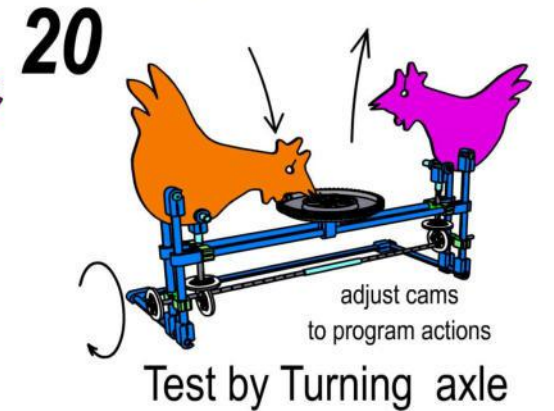
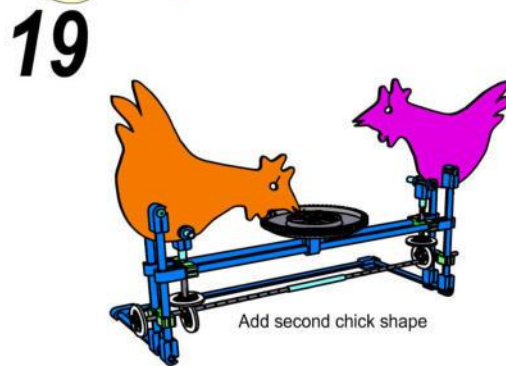
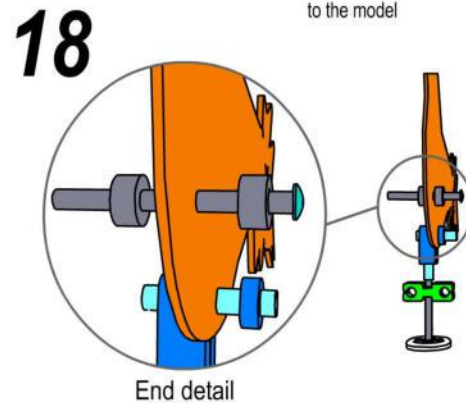
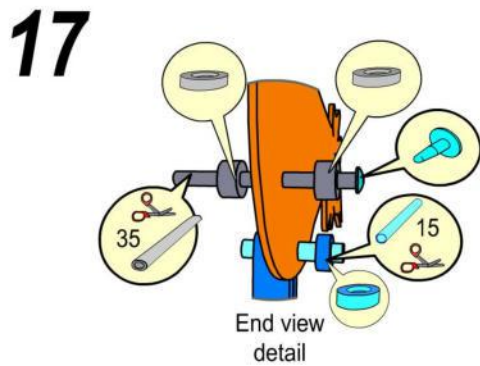
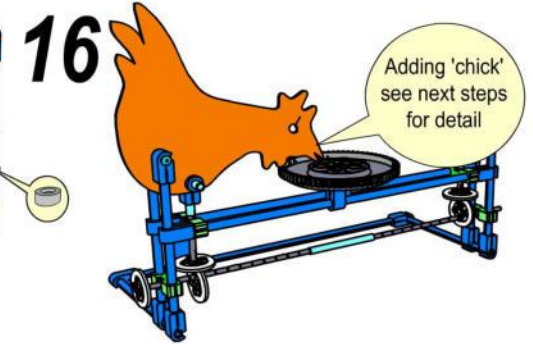
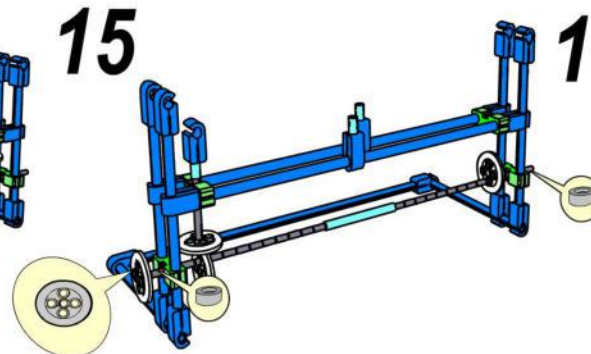
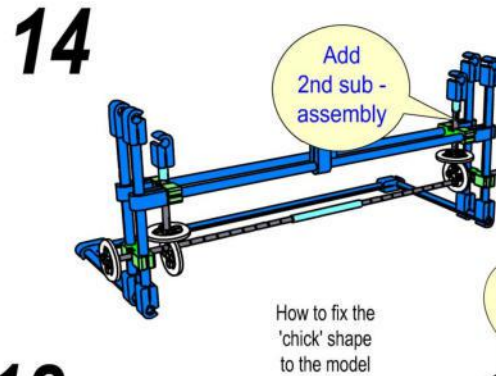
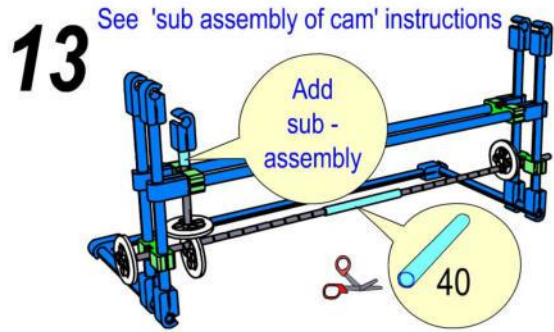
The rods are easier to insert into the connectors if twisted as they are pushed into place.  
Younger students should 'round off' and smooth the tube and rod ends using the abrasive paper.

**TO MAKE** ALL SIZES IN CM  
Use these 'step-by-step instructions' as a guide and adapt as you want.

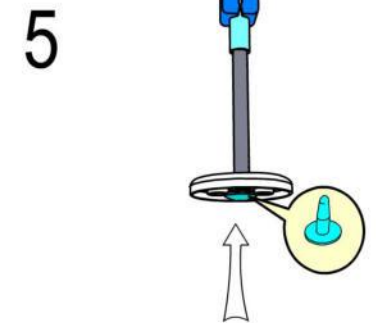
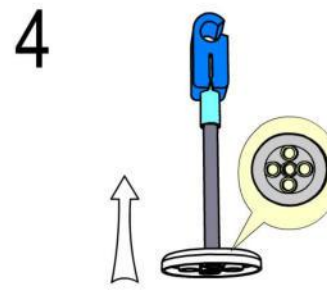
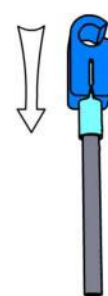
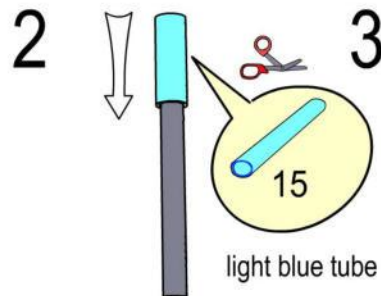
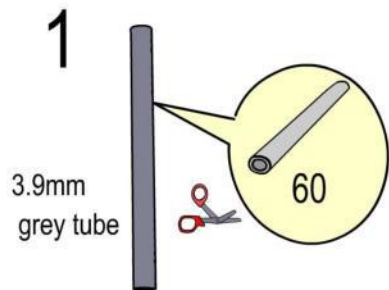
**IMPORTANT NOTES**

- 1) **ONLY** cut up connectors as needed
- 2) Use a metric ruler for measuring
- 3) For **EASY assembly** -
  - a) **Round** the end of the rods with abrasive paper then
  - b) **Push and twist** the rods into place





Sub-Assembly of 'cam follower' and connecting rod

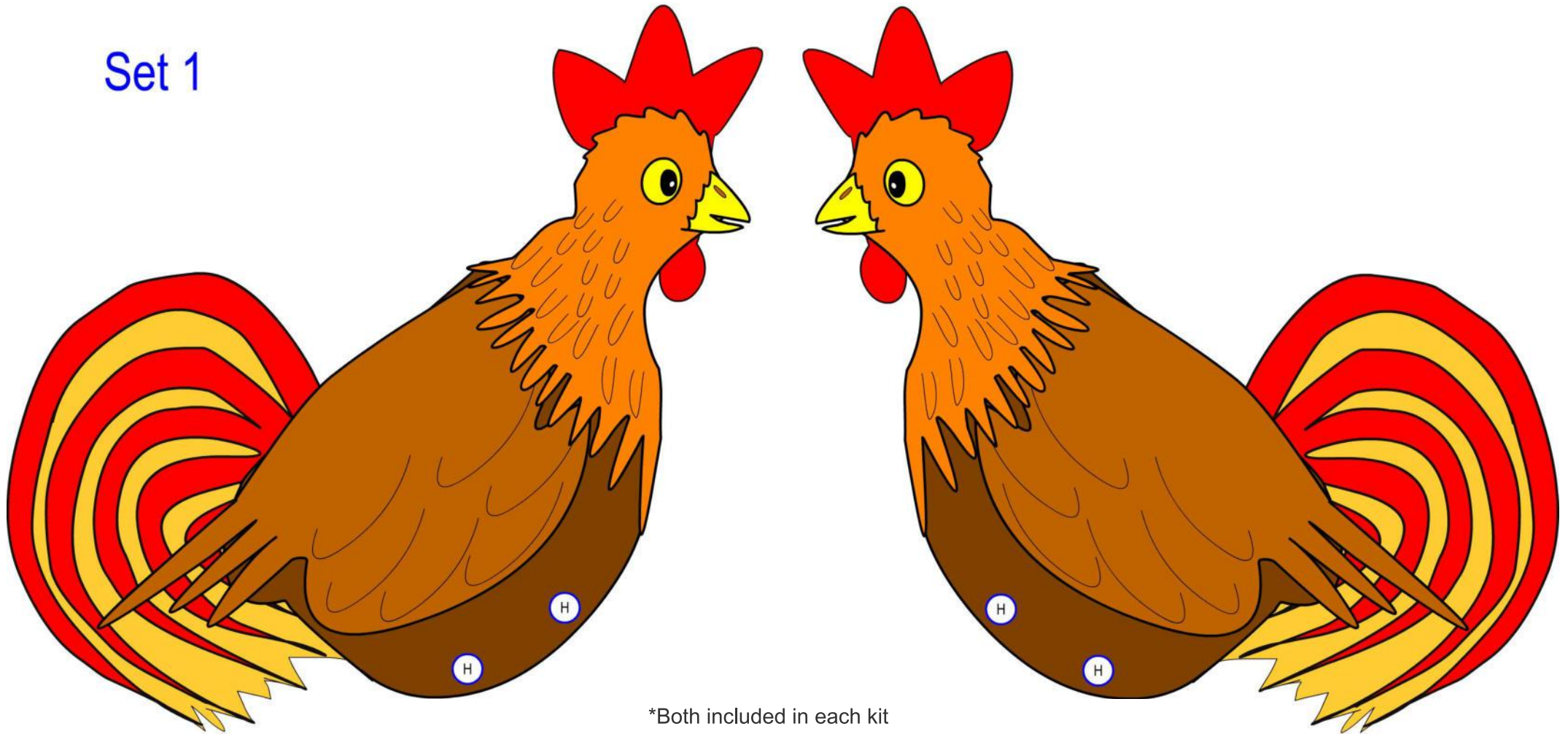


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# Kre8® Birds Feeding - Cutout



Set 1



\*Both included in each kit

These laminated sheets need to be cut out and holes punched as marked by 'H' holes