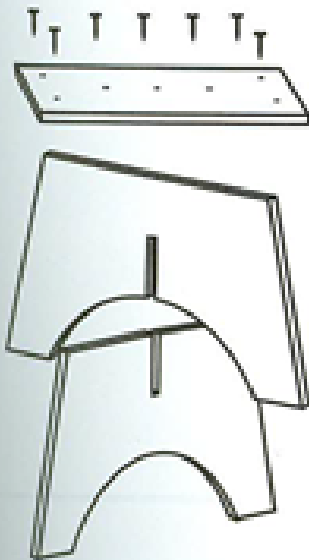


exploded view diagram

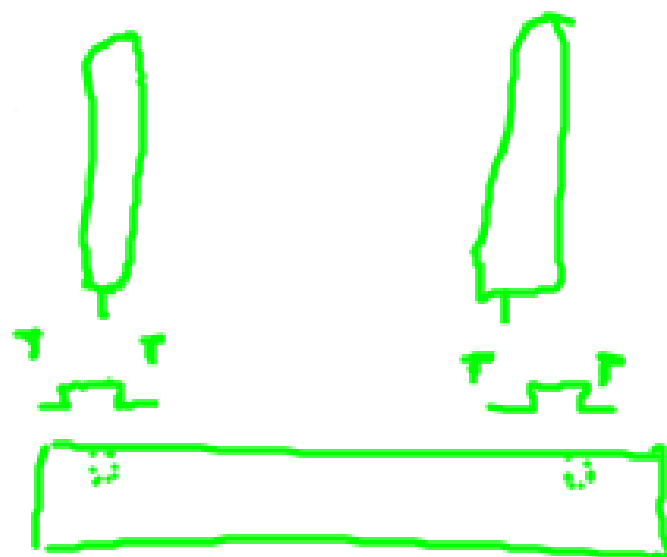
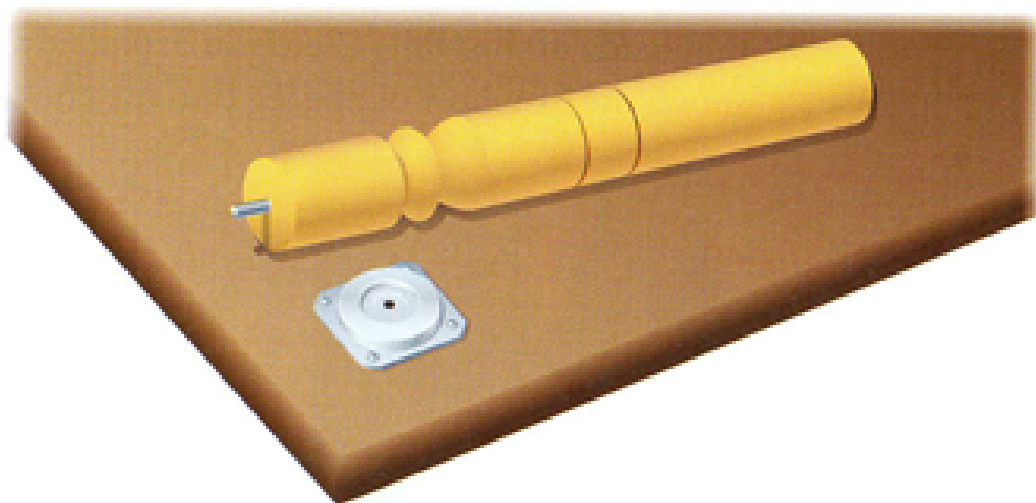
- a drawing that shows the components of an object with the parts slightly separated
- often used to show the sequence of steps for assembling an object
- usually shown as a set of isometric drawings



If you've ever built furniture, you've probably seen exploded views.

They are very useful, because they show individual pieces, as well as their position in the larger object.

Currently, George is working on the assembly instructions for putting the legs on a coffee table.



- a) List the steps for assembling the table.
- b) Create an exploded view diagram of the assembly.

Step 1 : Lay table with holes facing up.

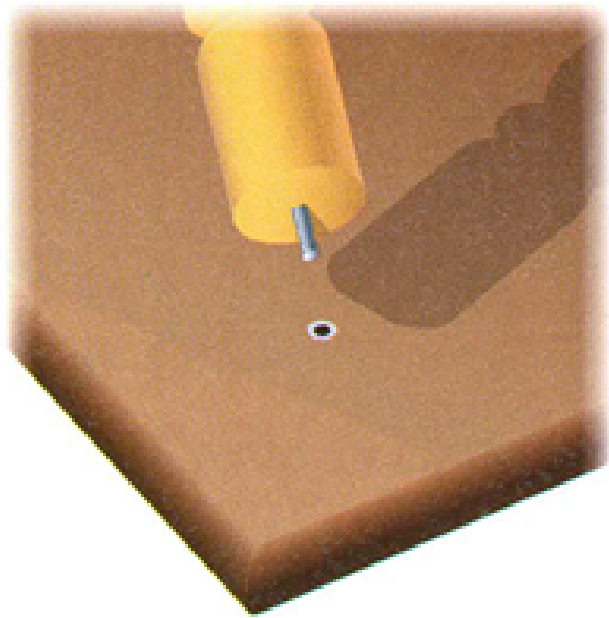
Step 2 : Place metal bracket on table w
holes lined up

Step 3 : Fasten metal bracket to table
using screws.

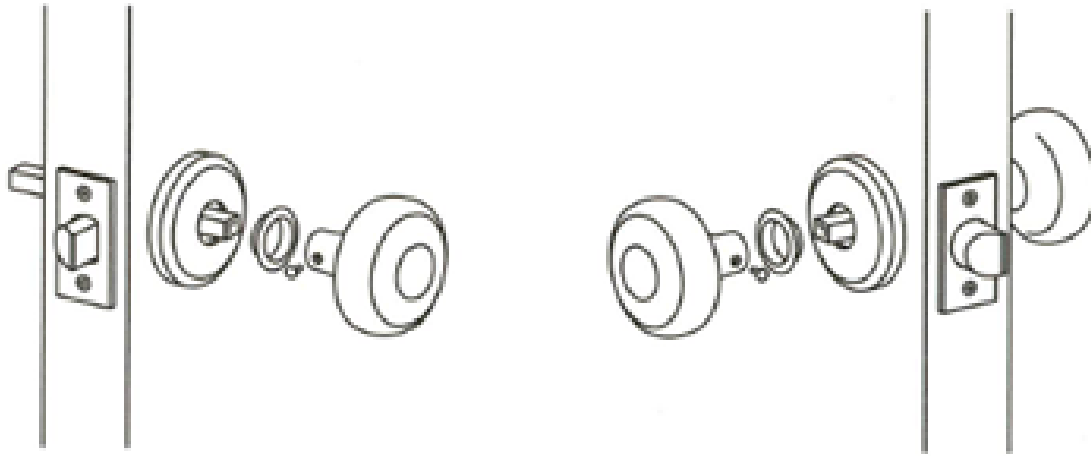
Step 4 : Screw legs into metal bracket

Your Turn

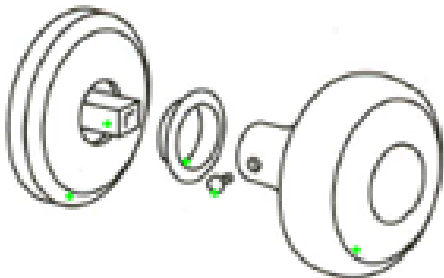
The end table that matches the coffee table does not use plates. Each of the four legs screws directly into a predrilled hole in the underside of the table. Sketch an exploded view diagram that shows the assembly of one leg into the end table.



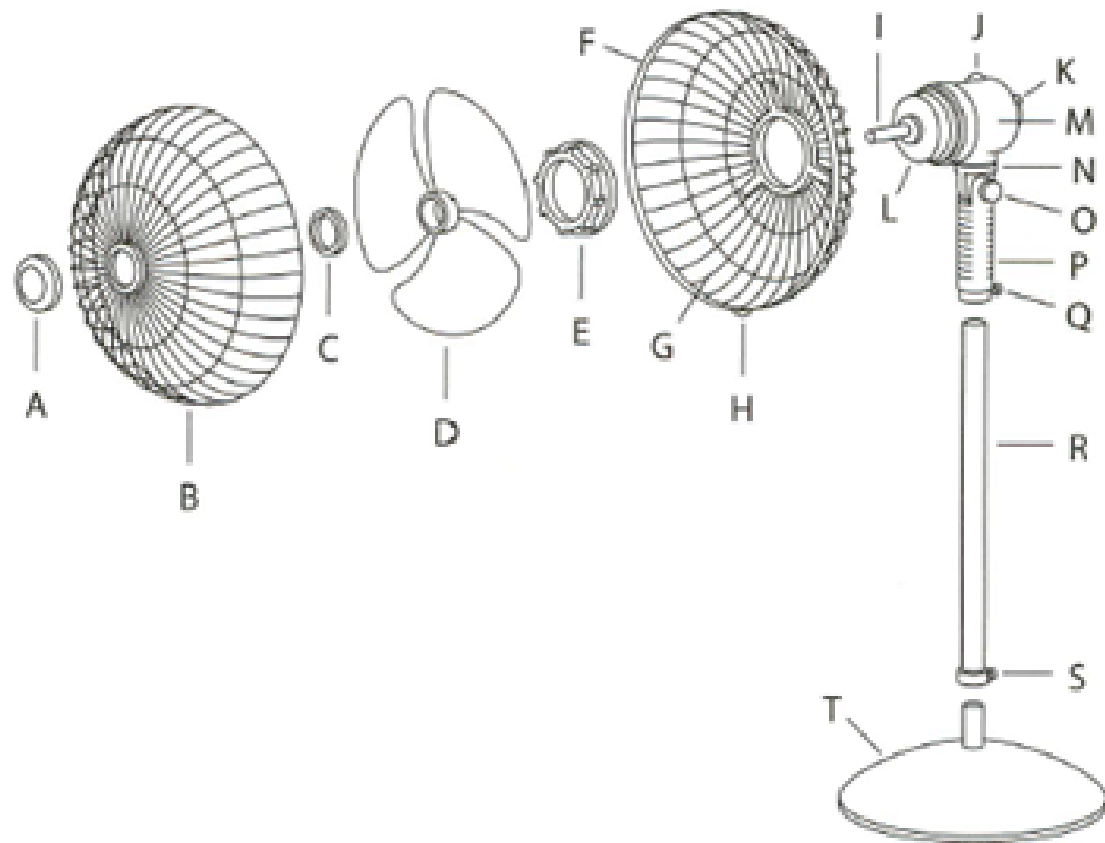
1. a) Identify the item shown in the exploded view diagrams.



b) How many parts are shown in the diagram below?



2. a) Identify the item shown in the exploded view diagram.
b) What names would you give to parts B, D, M, and T?



- 3. a)** Using linking cubes, build a rectangular prism that is 3 by 1 by 1.
- b)** Separate the cubes. Line them up in the order you assembled them in part a).
- c)** On isometric dot paper, sketch an exploded view diagram of the rectangular prism. Make it a scale diagram. Label your diagram with the scale you used.

4. a) List the ingredients that someone would use to make a peanut butter and jam sandwich.



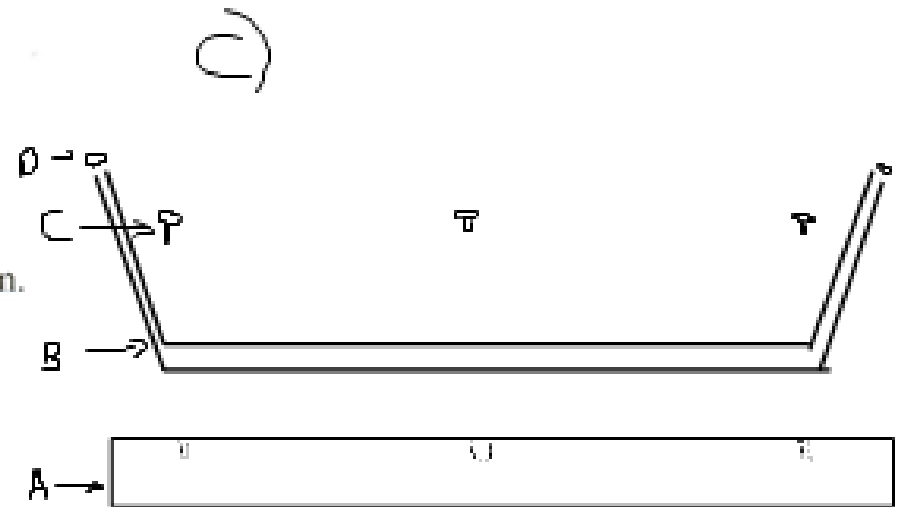
- b) Starting with the bottom piece of bread, list the ingredients in the order that the person would build the sandwich.
- c) Create and label an exploded view diagram of the sandwich.

5. Choose an item in your classroom or school, such as a chair, that is made up of a number of parts.

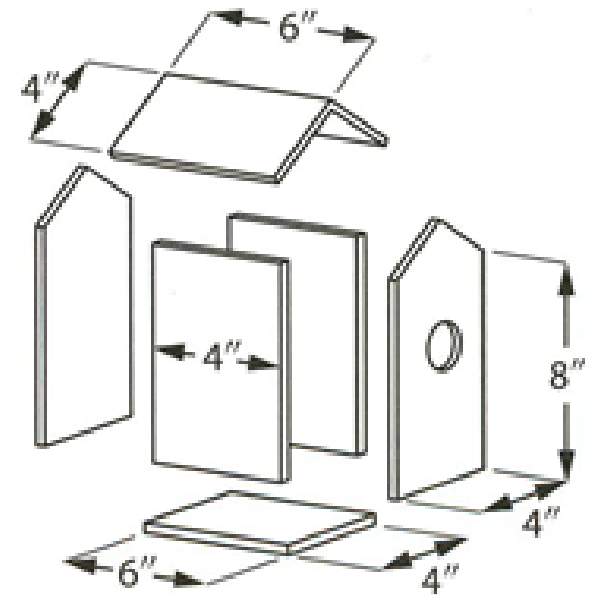
- a) List the parts and the quantities of each part that make up the item.
- b) Write the sequence of steps for assembling the item.
- c) Draw an exploded view diagram of the assembly of the item.

- a) A - Table Top x 1
- B - Leg Unit x 1
- C - Screws x 18
- D - Pads x 4

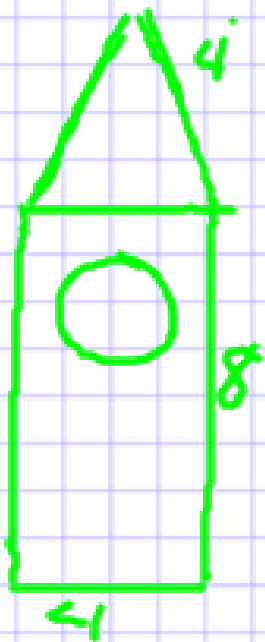
- b) Step 1: Lay the table top on the ground, holes up
- Step 2: Line up the holes on the leg unit with the holes on the table top
- Step 3: Attach the leg unit to the table top, using the screws.
- Step 4: Attach the protective pads to the end of each leg.



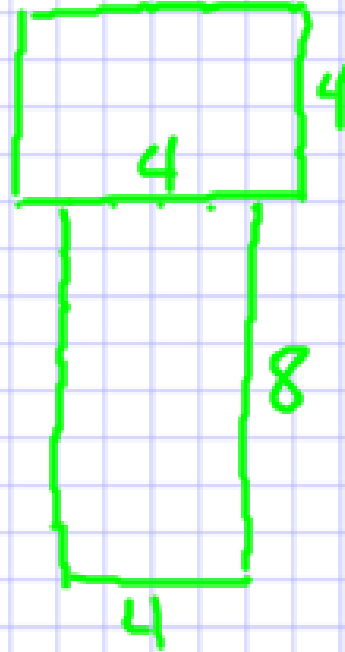
This exploded view diagram shows a birdhouse. Using grid paper, create 3 orthographic sketches of the birdhouse, to scale.



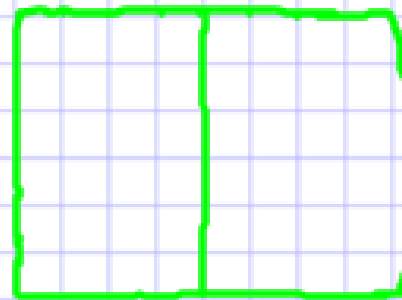
Front



Side



Top



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