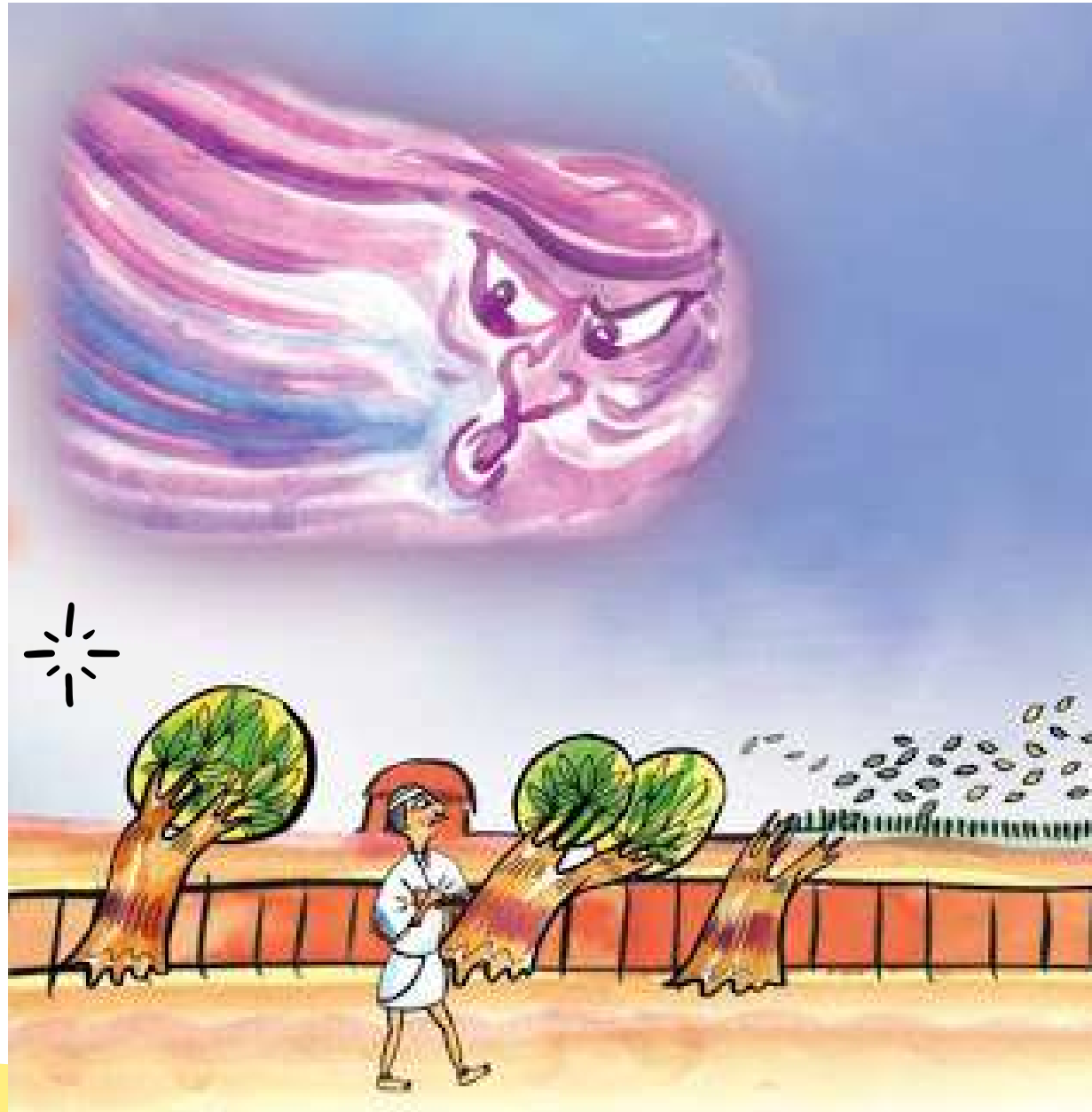




The wind and The Sun

Activity Sheet for Students

letsread.asia/WindandSun



Did you enjoy the story of the wind and the sun?
Which one do you prefer? Just check the box.

- The scorching heat of the summer.
- The warmth of the sun in the winter.
- The rainy season The heady wind during monsoon.
- The cool breeze of air in autumn.

Both the Sun and the wind are very important for us. Can you think of reasons why the Sun and the wind are important for you?

Sun is important to us because_____

The wind is important to us because_____

Those are great reasons. Let's try to make the wind do some work in the presence of the Sun.



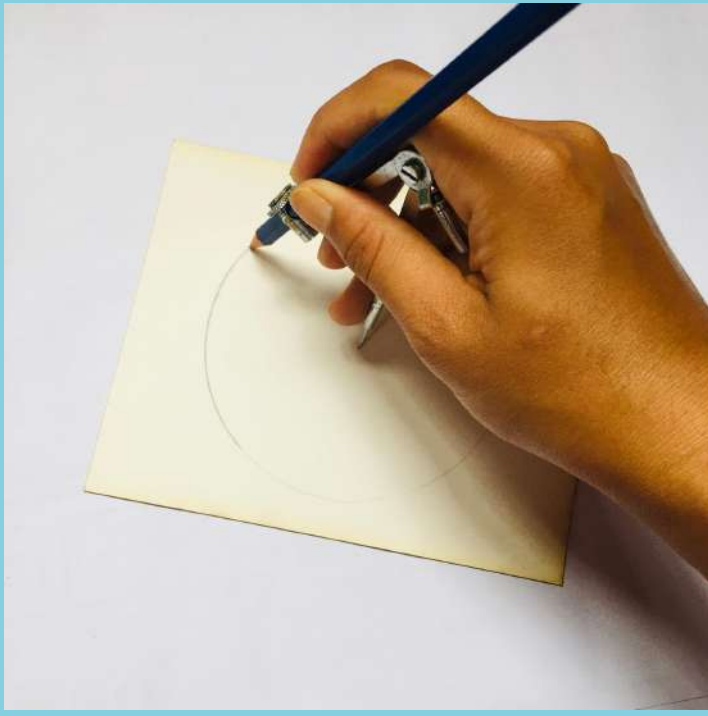
Before we start making,
Make sure to have these:

1. Paper cup
2. Scissor
3. Food stick
4. Straw
5. Sharp Pencil
6. Thread
7. Compass
8. Ruler
9. Construction Paper/cardboard
10. Marbles/pebbles



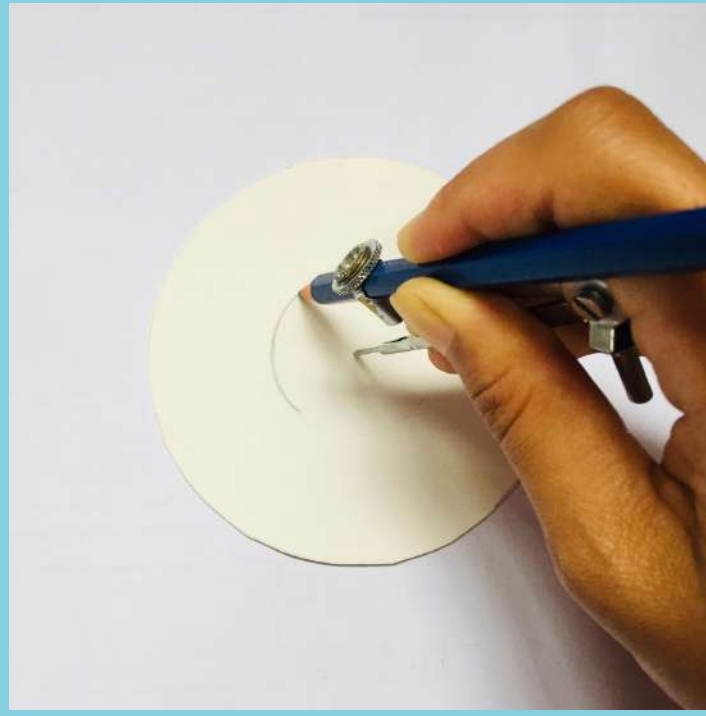


Let's make our own Foo-Machine



Step 1

Make a circle of radius 5 cm using a compass on the construction paper.



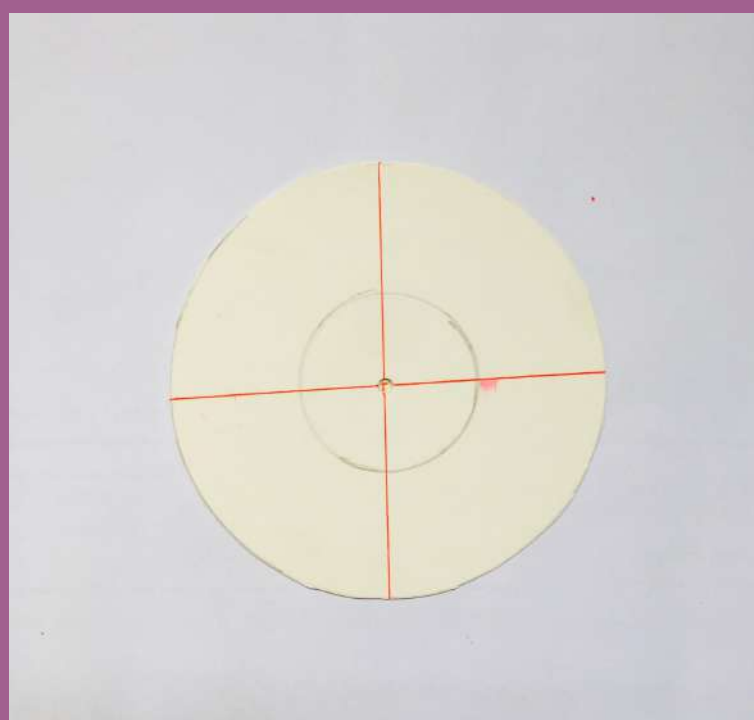
Step 2

Cut out the circle and draw another circle inside it of radius 2 cm.



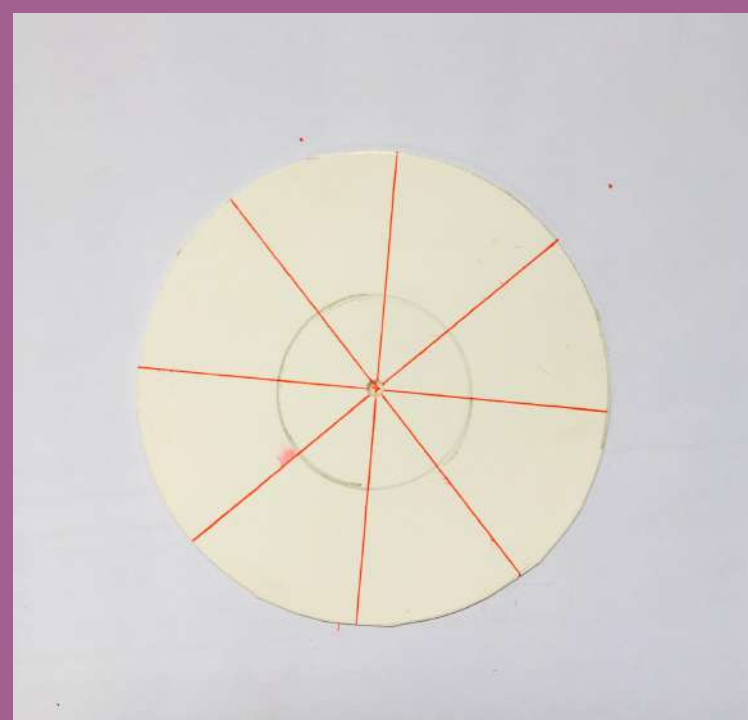
Step 3

Make a small hole in the centre of the circle



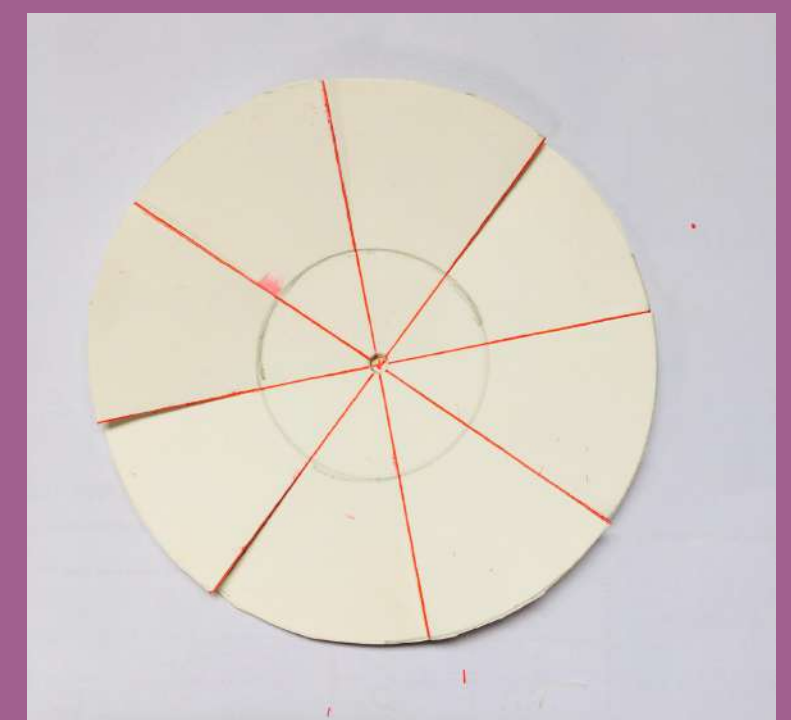
Step 4

Draw two lines on the circle passing from the centre as above.



Step 5

Again draw two lines in between the previous lines. You will have 4 lines in total.



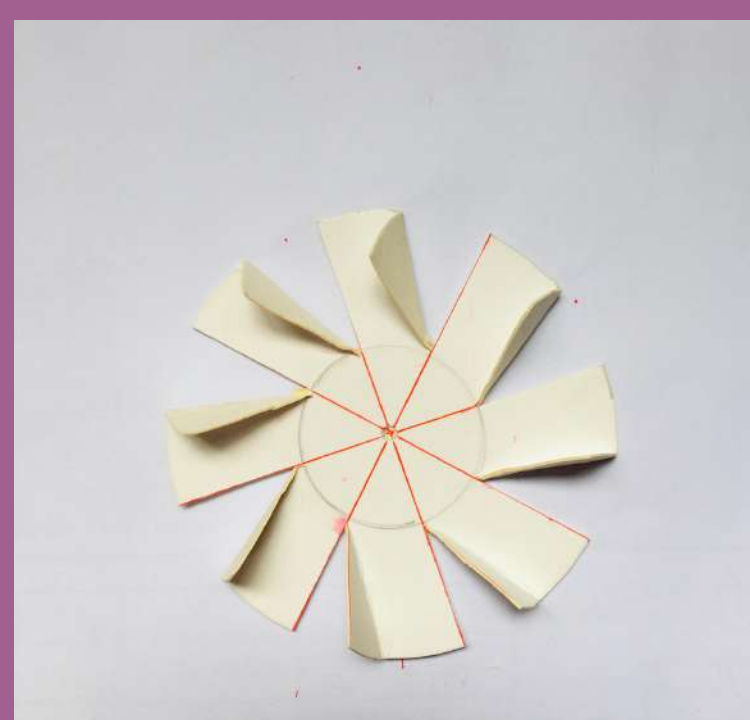
Step 6

Now, cut the lines up to the inner circle.



Step 7

Fold each wing mid away so that it looks like a turbine.



(Final view of the turbine)



Step 8

Take around a 50cm long thread and tie it on one end of the food stick.



Step 9

Now take a paper cup and make a small hole on its side and tie the other end of the thread.



Step 10

Take another paper cup and make two holes in it to insert the paper straw.



Step 11

Cut the straw in the required length and insert the food stick inside the straw.



Step 12

On the other end of the food stick, insert the turbine facing inwards.



Step 13

Your foo machine is ready to work. Blow wind to your turbine and observe the turbine pull the paper cup up.

Challenge Your Skills

1. Put a few marbles in the cup and try to lift the weight using air/wind.
2. Blow air from different sides and find out the easiest angle to rotate the turbine.
3. Use a straw to blow the air to rotate the turbine. What difference did you observe?

Challenge Your Mind

1. Share examples of machines and tools that use a similar concept like that of the Foo-machine.
2. Find out what simple machine principle is the foo-machine based on.

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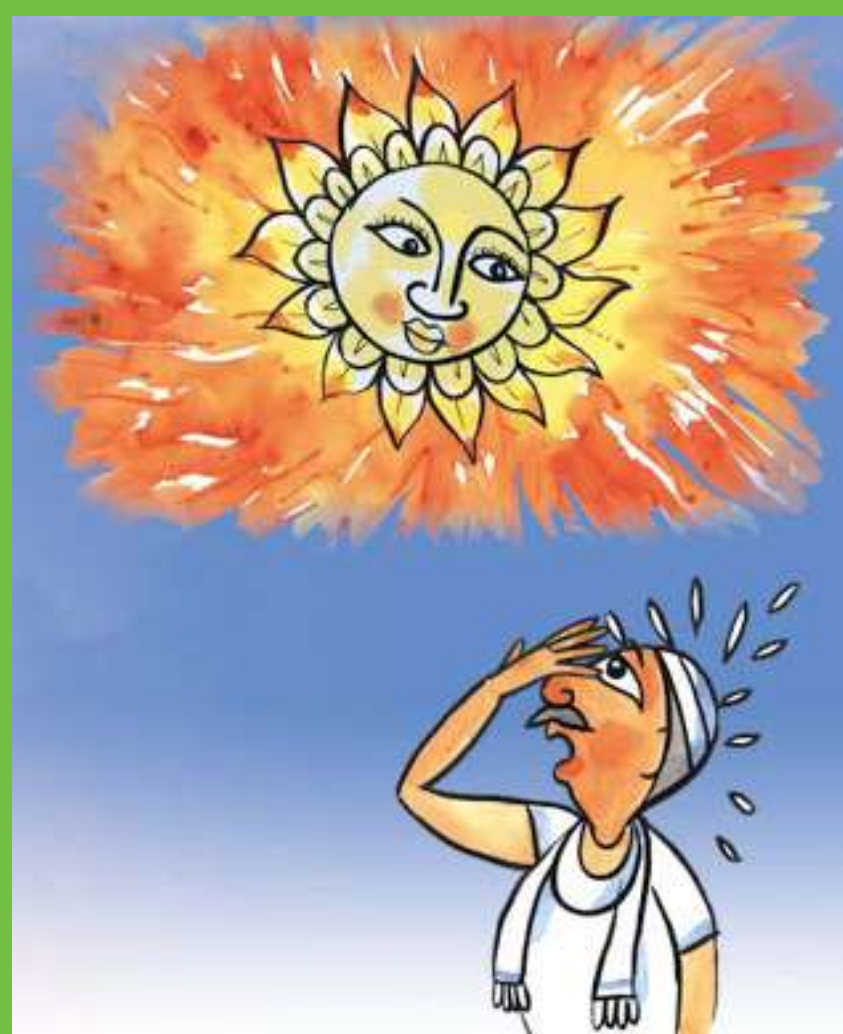
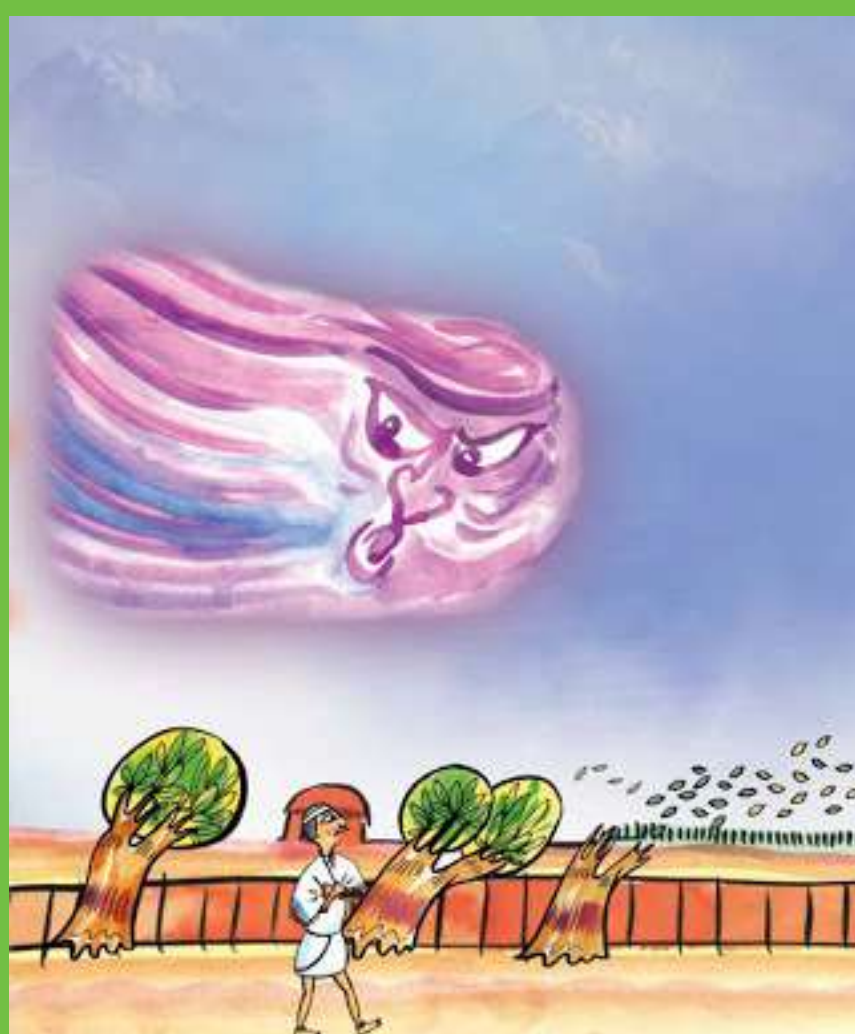
WORKSHEET



Challenge your friends to compete with you to pull the cup up with some marbles in it. After the completion of the game, the person with the lowest score wins.

Use this sheet to keep a record of the scores.

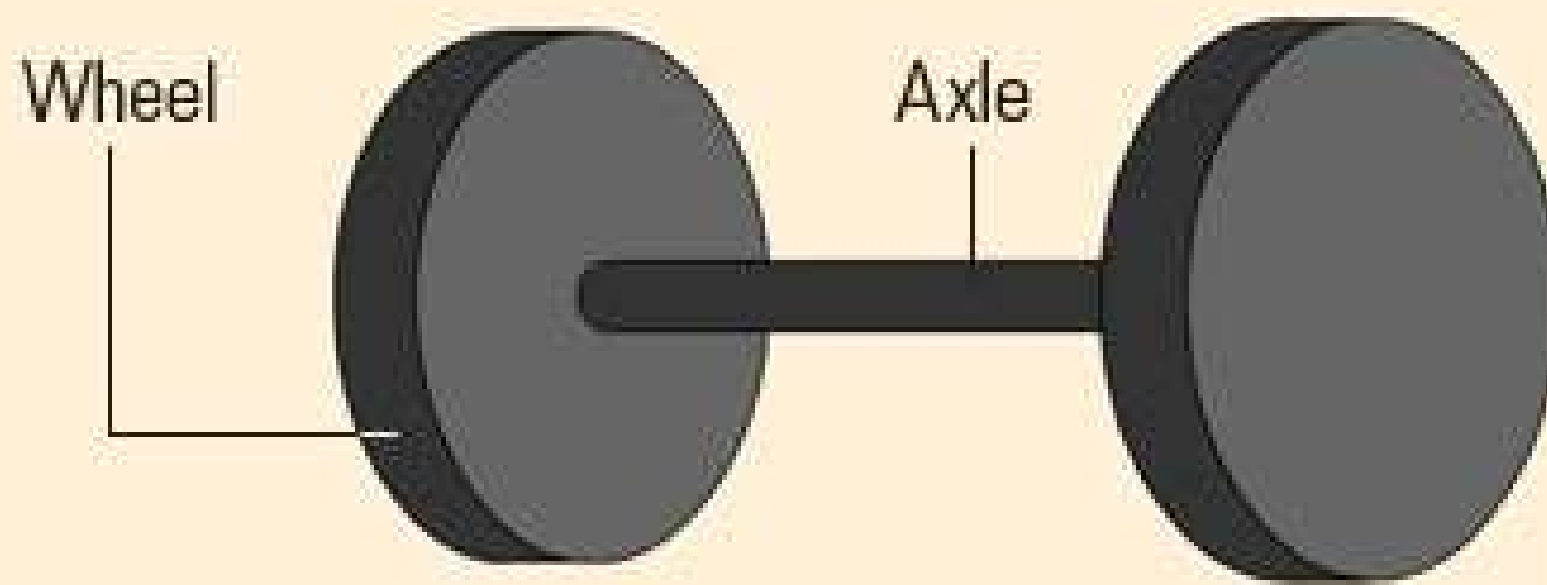
S.N.	Names	1 Marble	2 Marbles	3 Marbles	Total Score
1	Hari	2 blows	3 blows	5 blows	10
2					
3					
4					
5					
6					



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HANDOUT

How does the foo machine work?



The Foo machine that you made today works on the principle of a wheel and axle. The turbine is the wheel and the stick is the axle. When the turbine spins, the stick also spins. **For one complete turn the turbine makes, the stick makes many complete turns.** That's how it makes our work easier.

Where else have you seen wheel and axle systems around you?

