











# Magnetism Student Sheet

Making a Paperclip Float

Materials: string, paperclip, different types of magnets

In the story, Alex says that the paperclip “floats in the middle of the air.” Describe what you think causes the paperclip to do this. Sketch it out.

Now try to make your paperclip float in the air. What do you notice? What do you wonder about how this works?

Alex described two ways that magnets interacted. What were they?

Explore the different magnets you have. Try each of the following and describe what you observed by sketching it out.

Try and place different types of magnets near each other on the table.

Place magnets on top of each other. Then flip one or two of the magnets over.

Place magnets on top of and under a piece of tagboard.

Making a Magnet Float:

Materials: Wooden dowel that will fit through the ring magnets. Two ring magnets.

Describe what happened when you put the two magnets on the wooden dowel. Now flip the top magnet over, explain what happened.

Do all magnets stick together or push away? Describe when a magnet acts in each way.



## KLEWS Chart



What are we investigating? What is our question?

How do objects interact with magnets? How do magnets interact with each other?

What do we think we  
**KNOW?**



What are we  
**LEARNING?**

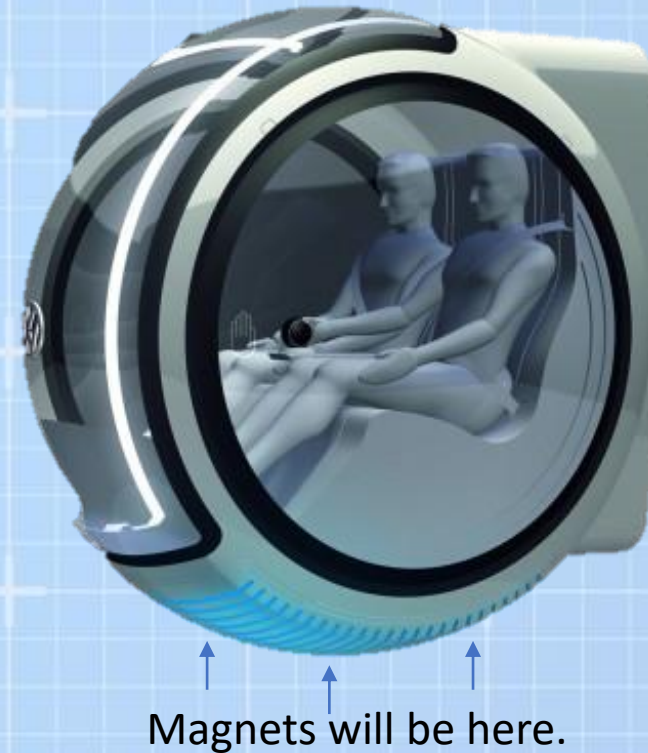
What is our  
**EVIDENCE?**

What are we  
**WONDERING?**

What **SCIENCE** words  
and principles help us  
explain?

# Hover Car Blue Print Sheet

- You have been asked to help the engineers figure out what city streets would need to look like so that the Levitating Hover Car would work in the future.
- The picture of the car is only an idea at this point.
- In thinking about the car design, we know that there will be magnets at the bottom.



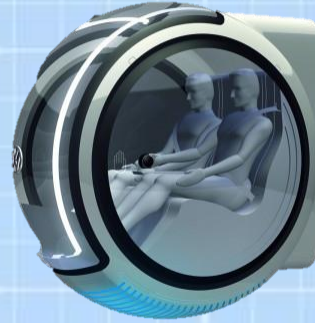
<https://laughingsquid.com/volkswagen-hover-car-concept/>

If magnets are on the bottom of the hover car, how could we make it levitate above a street?



How is the hover car similar to the Maglev train? How is it different?

**Similar**



**Different**

What would happen if the hover car crossed the line at the end of the street and there were no magnets?

