

# COLLOIDE LEARNING

# Water Educational Resources Booklet

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# WHAT IS WATER?



Water is the most important liquid on Earth. It covers almost 75 percent of Earth's surface in the form of oceans, rivers, and lakes. All plants and animals need water to live. People have many uses for water besides drinking.



# THE LETTER 'W'

A B C D E F G H I J K L M N O P Q R S T U V **W** X Y Z

Trace the Ws.



Colour the W.



W is for Water

Circle the Ws.

A W Y B W C M S W

# HELP SAVE WATER

It is important to save water because it helps  
plants, animals and humans to live.

Help save water by making sure that the tap is off and not dripping!

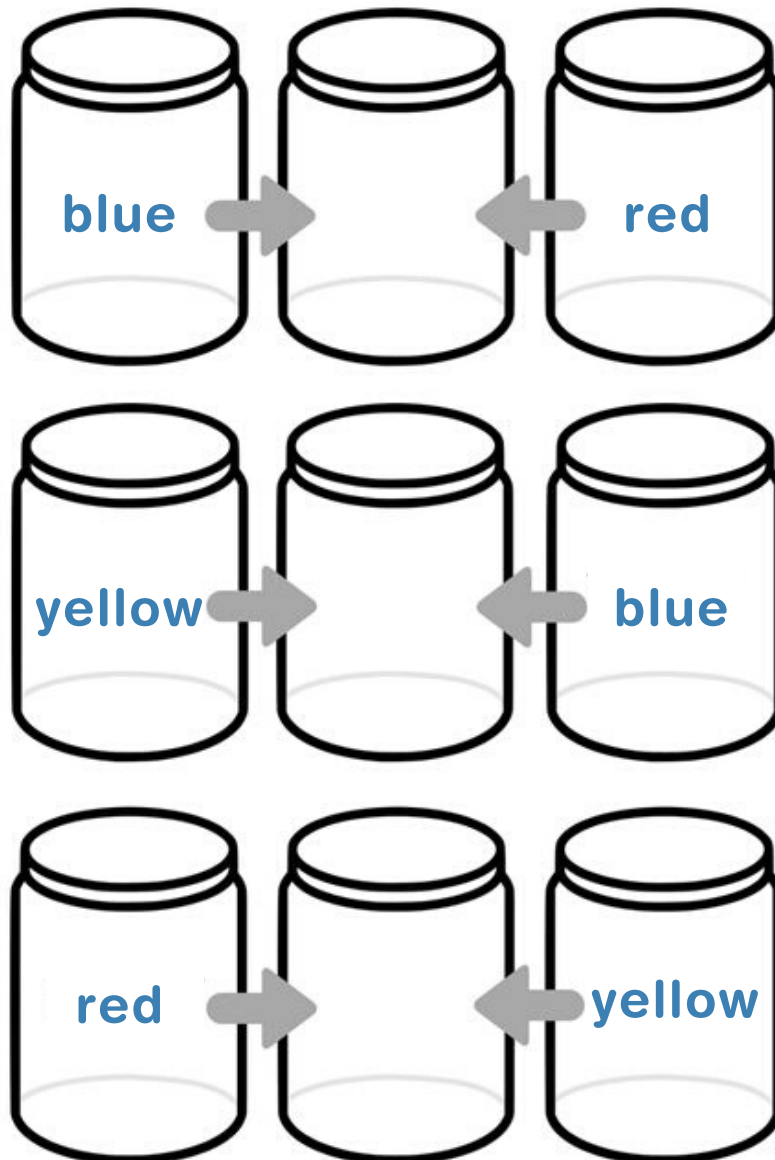
Help the person to the leaky tap to turn it off.



# COLOUR MIXING

What colour do you think the water will be?

Figure out what colour of water is in each jar and colour it in.



[Instructional Photos](#)

[Instructional Video](#)

## Sources

Video - <https://youtu.be/9EUfVlon6t8>

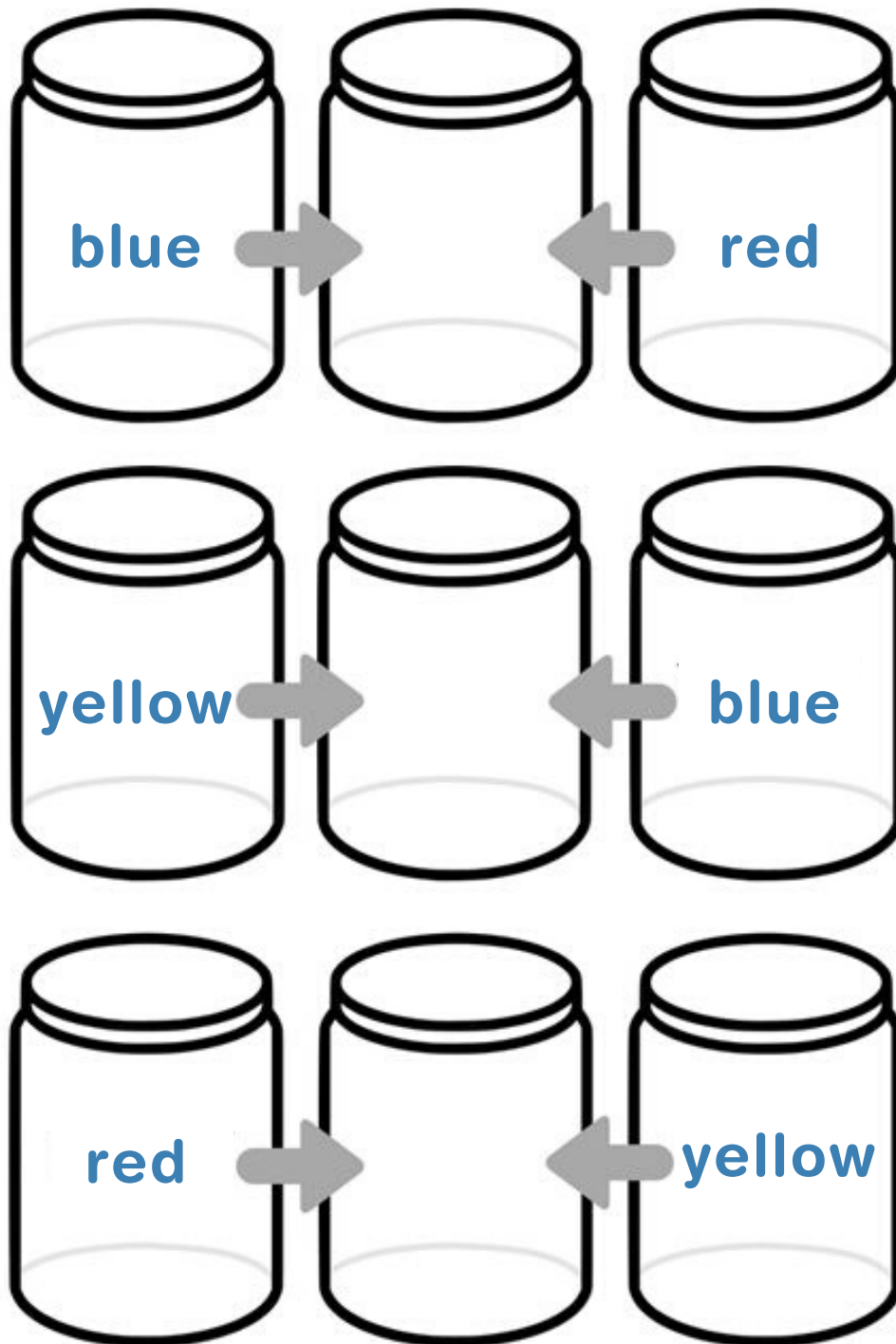
Images - <https://www.coffeecupsandcrayons.com/walking-water-science-experiment-kids/>

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# COLOUR MIXING

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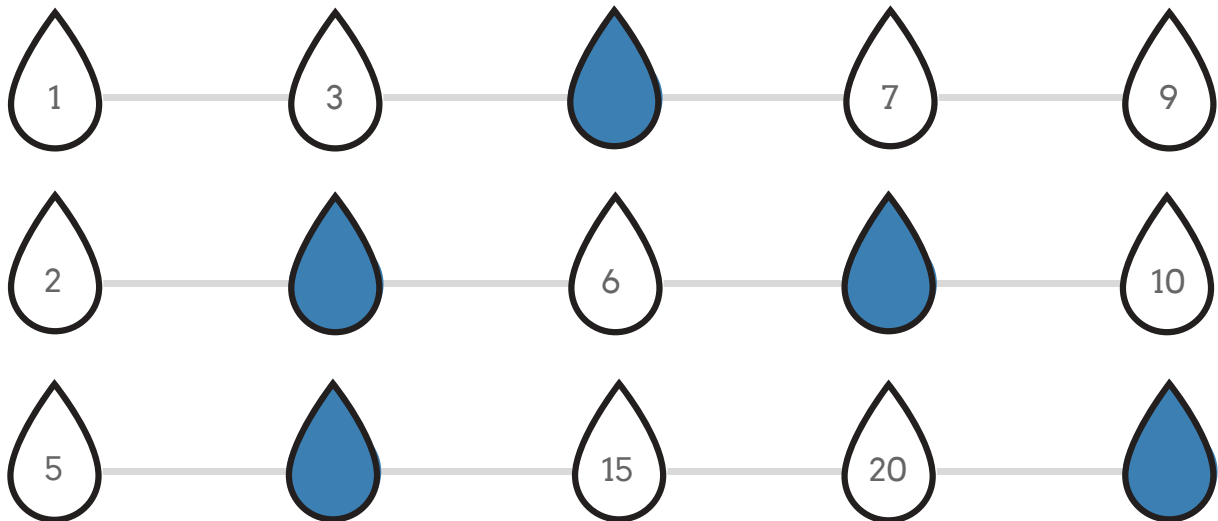


# NUMBER LINE CHALLENGE

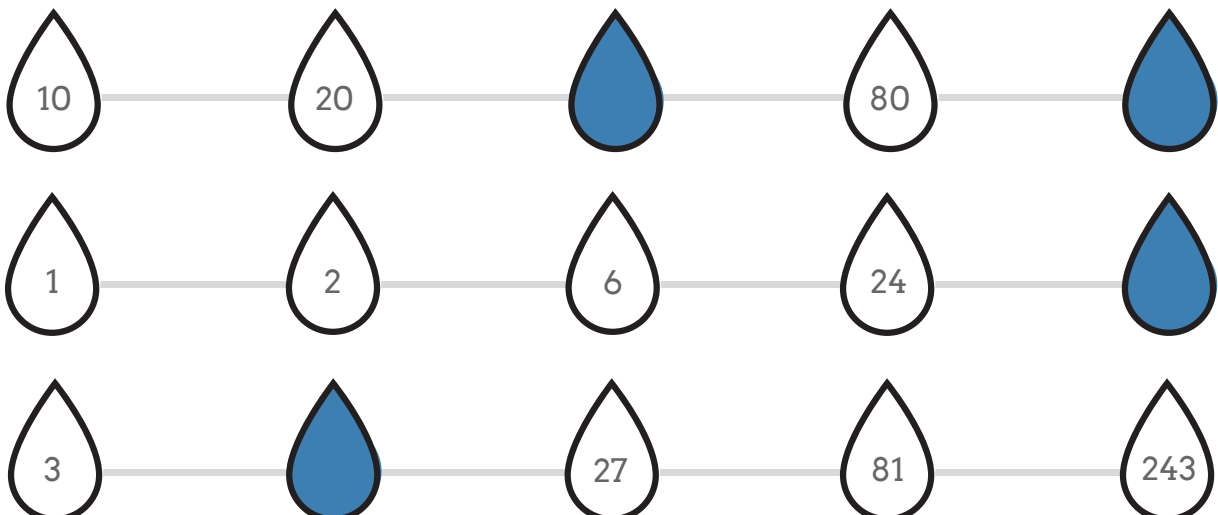
## HOW QUICK CAN YOU THINK?

Instructions: Complete the following number lines by supplying the digits required. Use the provided numbers as guide.

### SET A | 5 POINTS EACH LINE



### SET B | 10 POINTS EACH LINE



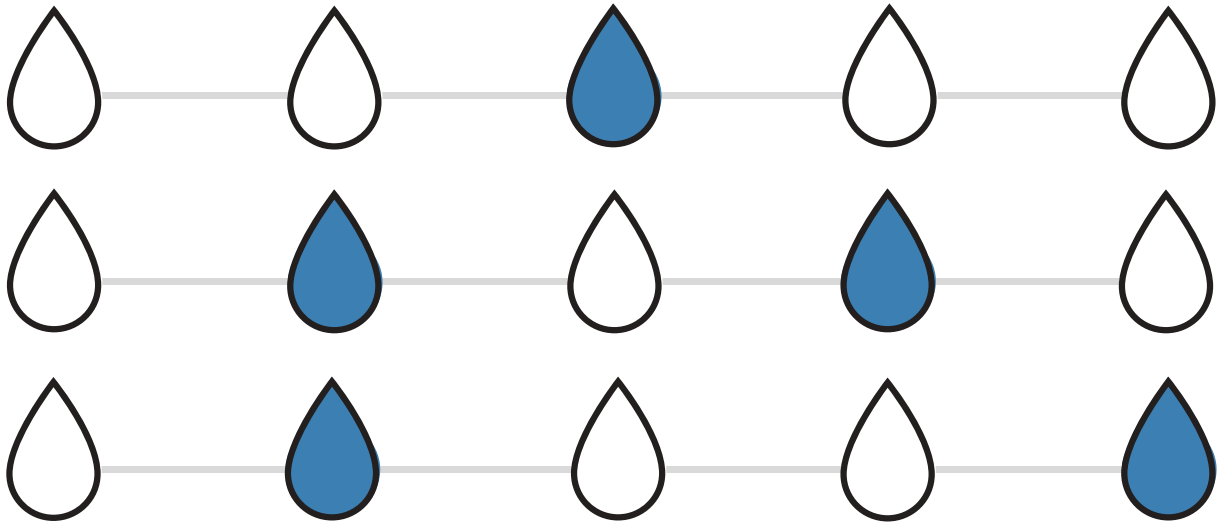


# NUMBER LINE CHALLENGE

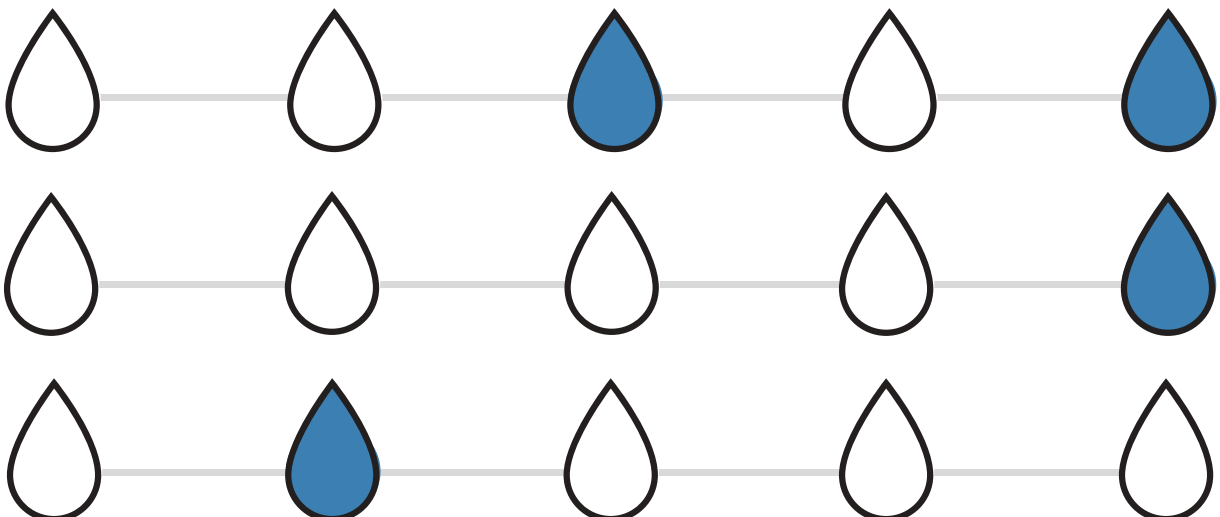
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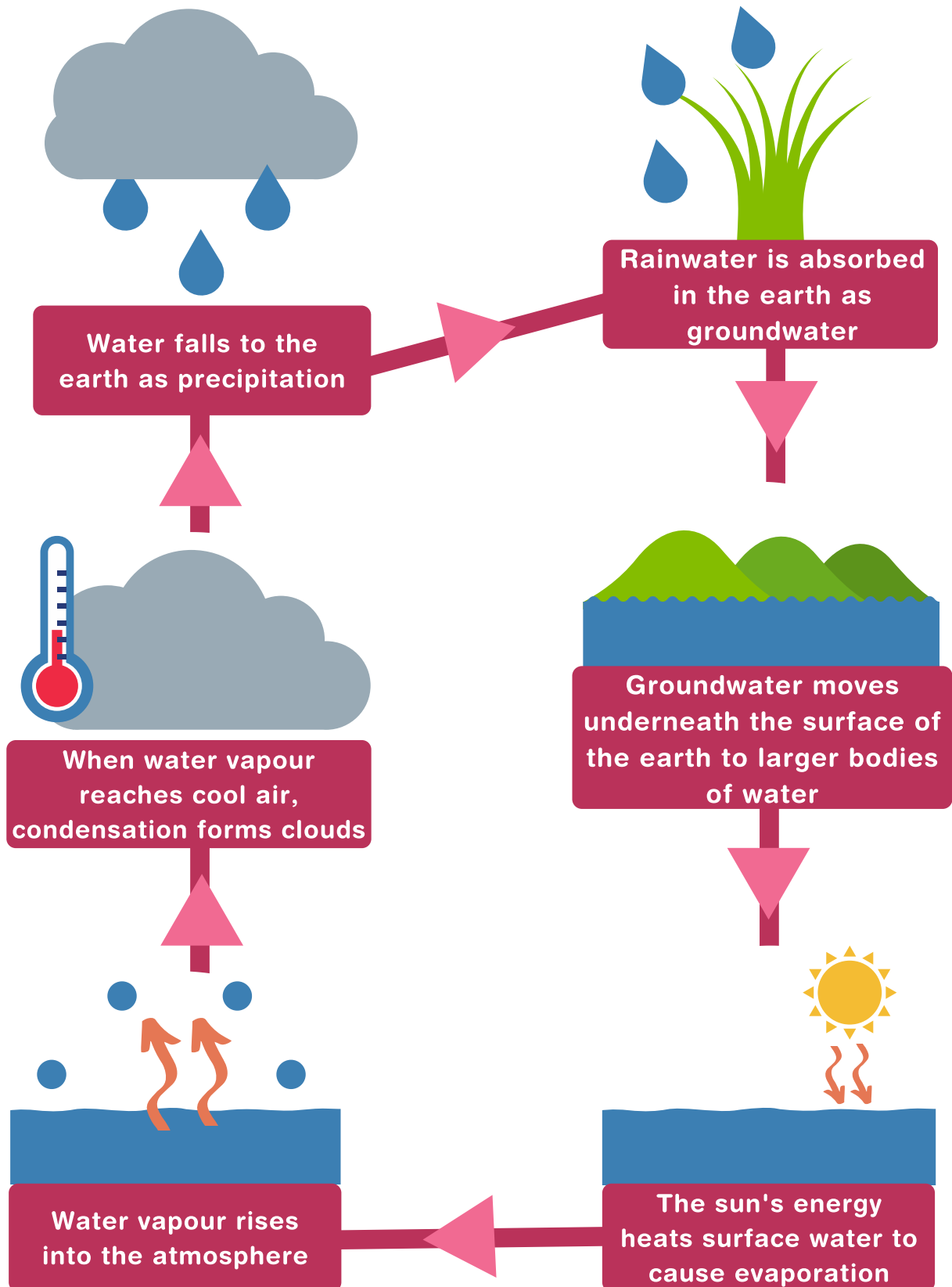


### SET B | 10 POINTS EACH LINE



# WATER CYCLE

Water on Earth is constantly moving. It is recycled over and over again. This recycling process is called the water cycle.



# WATER WHEEL

**Learn how to construct a water wheel with household materials. Examine how energy can be created using liquids as a source of power.**

Please note: This activity can be simplified to cater to younger learning levels.

## What is a water wheel?

Water wheels are not as efficient as other sources that generate power. However, they are still very effective. A water wheel is a large wheel that turns when water is poured over it. The wheel spins to produce energy for electricity or to lift objects.



## What is hydropower?

Water power or hydropower is power from the energy of falling or running water. This energy can be harnessed for other purposes.

## What is renewable energy?

Hydropower is the nation's largest source of renewable energy. Renewable energy is energy that comes from a source that is not depleted when used. This includes energy from sunlight, wind, and water.

## Key Vocabulary

**Hydropower** - Energy from falling or running water

**Hydroelectric** - Generation of electricity using flowing water

**Renewable resource** - Energy that is not depleted when used

## Sources

Content - <https://www.siemensstemday.com/educators/activities>

# WATER WHEEL

**Learn how to construct a water wheel with household materials. Examine how energy can be created using liquids as a source of power.**

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Please note: This activity can be simplified to cater to younger learning levels.

## Materials Needed for Activity

- Sink or large plastic tub
- Tap or plastic bottle filled with water
- Scissors
- Wooden barbecue skewer
- Variety of small weights (stones, pennies, lego bricks etc)
- Plastic cups (alternatively you could use a variety of lids from sprays etc.)
- Strong sellotape
- Paper plates (alternatively you could cut out two circles from a thick piece of cardboard)



## Instructional Video

## Extension Activity

Explore how other natural resources can be used as power. Learn about topics such as solar power, wind power, and biofuel.

### Sources

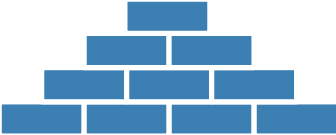


Video - <https://youtu.be/HUaaFE8regs>

Images - <https://www.pinterest.co.uk/pin/303218987413380410/>

Content - <https://www.siemensstemday.com/educators/activities>

# STATES OF MATTER

Directions: Cut and place the word in the correct column.

 <b>SOLID</b>	 <b>LIQUID</b>	 <b>GAS</b>

air	table	door	milk	smoke
water	river	steam	rock	apple
juice	brick	tree	wind	rain



# EXTRA RESOURCES

Click the links below to access additional learning materials

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## STEM

[Make an earth water filter](#)

[Water cycle interactive video](#)

[Water word scramble](#)

