

It's About Time

Sample

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Watching the Clock?

Name:



Do you know how often you check the time and **when** you need a clock or watch?

Do you **always** need a clock to tell you that it's dinner time?

Make a list of 5 times during the day that you "check the clock".



Think of some other times during the day when you can tell **APPROXIMATELY** what the time is without looking at a clock or watch.



Draw a "birds-eye" map of your house with labels showing all of the devices that show time.

Include a key with symbols to show whether it is a clock, a watch, a digital display or other:

Key:

..... **Clock**

..... **Watch**

..... **Digital**

.....

.....

.....



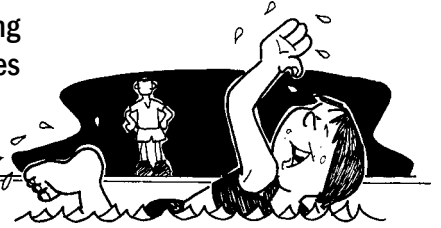
Related Outcome: Students will indicate when and where time is used.
Subject Areas: Maths - Measurement.

Timing and Technology

Name: _____



In sporting events such as the Olympic Games, timing devices are used to determine split-second times. Find out about some of these by visiting **www.nsc.gov.au** and search for the download of “Brief History of Timing in Sport”. Advances include highly sensitive touch pads at the end of swimming pools, digital cameras with inbuilt clocks, photo beams across finishing lines and automatic radio transmitters attached to competing athletes.



- 1] How have these advances changed the outcome of results?

- 2] Do you think that these advances in timing are positive or negative, and why?

Although we as humans seem to remain the same, world time records are continually being broken. Write down three theories you have to explain the ongoing broken records:

- ① _____
- ② _____
- ③ _____

Compare your theories to a classmate. Do you share any common ideas?

Below, draw your plans for a timing device to more accurately record times during races at a school sports event.




Related Outcome: Students will investigate aspects of using technology to record time.
Subject Areas: Technology & Enterprise - Materials; Science - Natural & Processed Materials.

Drips in a Clepsydra

Name: _____

A CLEPSYDRA is another name for a water clock, a method that was used by the Egyptians, Greeks and Romans to show the passing of time.

 Your challenge is to see if you can make a clepsydra that shows the passing of ten minutes.

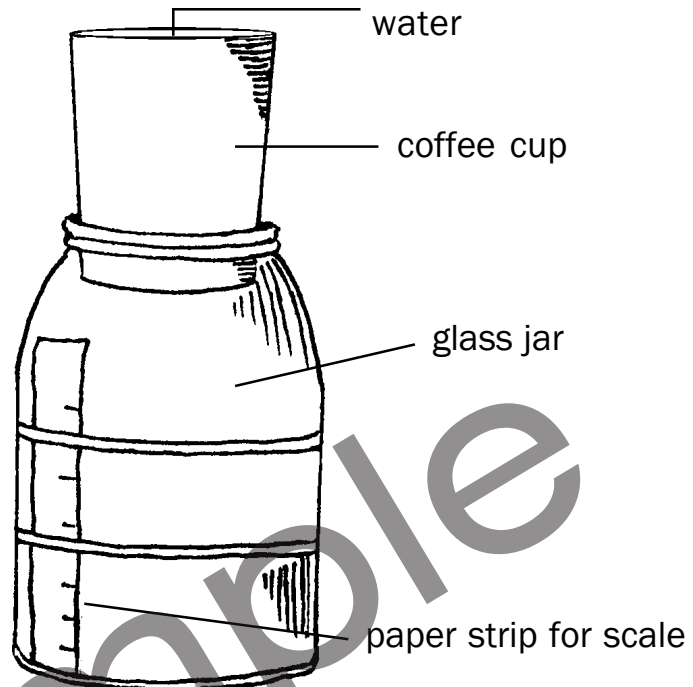
You need:

A small foam coffee cup or yoghurt container;

A small glass jar;


A strip of paper;

Two rubber bands.



What to do:

- Use a pin to make a small hole in the bottom of the coffee cup so that water flows through in droplets. (Start very small and only make it larger if you need to.)
- Set up your materials as in the diagram.
- Fill the top cup with water.
- Use the paper strip to show the water level in the glass jar at the passing of each minute. (Do this by timing with a second-hand on a watch or timer.)

 See if you can adjust the hole so that the timer can show **TEN MINUTES**.

 Brain Teaser: Are the marks the same distance apart all the way up the jar? Why or why not?

Go to **www.ernie.cummings.net/** and find out about other ancient timers that you can make. Compare them all to find out which one is the most accurate. Decide WHY it is the most accurate.

Time Zone Problems

Name: _____



What are some of the difficulties faced by a country like Australia, where there is more than one time zone?

Find out about time zones in Australia. Some atlases may contain this, or visit **www.worldtimezone.com**

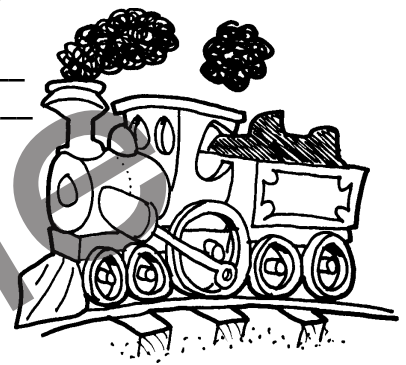
If you started from Sydney and travelled by rail to Perth, where would you have to change the time on your watch? By how much time would this change be?

1a] _____

2a] _____

1b] _____

2b] _____



On the map of Australia above, draw:

- The Trans - Australian railway line; Sydney to Perth.
- The states of Australia.
- The places where the train traveller must change his/her watch.
- Shade in the different Australian Time Zones.



Design a bright sign that reminds passengers on the "Indian Pacific", (travelling the Trans - Australian railway) to adjust their watches to the different Time Zones. Find out more about interstate train travel on **www.gsr.com.au**



Related Outcome: Students will relate their understanding of time zones to Australian states.
Subject Areas: Maths - Measurement; Science - Earth & Beyond.