Year 2: HASS and Science

Lesson Plan 2: Looking after our catchments

Introductory activities (engage)

(5 minutes)

Ask your students to think about something they record or look for each day.

You may find it useful to display an image of a picture graph or similar chart.

Monitoring
Observe and check the progress or quality of (something) over a period of time; keep under systematic review. Check, examine, keep an eye on, keep track of, observe, oversee, record, scan, study, track, watch.

If you use charts to monitor progress or achievements you could refer to these as prompt questions i.e.

- *How do we track how many books we have read?*
- *How do we know what date or day of the week it is?*

Explain that this process is called **monitoring.** People **monitor** their environment and surroundings every day.

Lesson 1 (explore)

(20 minutes)

Hydro Tasmania's water managers and scientists rely on regular monitoring programs to care for catchment areas.

The Hydro Tasmania website provides a lot of information on these programs which can be explored with the help of Expert Eddie and Solve-IT Sam, *Monitoring in our catchments.*

This could be completed on the smart board or printed and read.

Materials	Quantity
Internet connection	1
Smart Board or digital display	1
Monitoring in our catchments	1
Printed map of Tasmania	1 each

1. As a class or in small groups ask students:
   - How many ways water was monitored?
     (flow, level, rainfall, quality)
   - How often does monitoring occur?
     (daily)
   - How is information shared?
     (on the website)
   - Why does the Hydro Tasmania share the information they collect?
     (To help other water users, and other science projects and monitoring in the area)
   - Why would other water users want to know about water levels
     (Levels for fishing, launching their boats safely)
   - How is technology used?
     (Sharing information on website, creating GPS maps, monitoring instruments – loggers etc.)
   - How does monitoring the water level help threatened species?
     (It helps ensure their habitat is looked after)

Options for assessment and extension

<table>
<tr><th></th><th colspan="2">Options</th></tr>
<tr><td>SCIENCE

Science Inquiry Skills (Planning and Conducting)

Individual Activity</td><td colspan="2">Have students create a map of the vegetation at their school

Ask students to consider which animals may use the vegetation as habitat or shelter</td></tr>
<tr><td>SCIENCE

Science as a Human Endeavour

HASS

Researching

Individual Activities / Group discussions</td><td>(1 week)

2. Ask students to consider their daily routine and environment. What item/subject/topic could they monitor each day at the same time for a week?

Hints: how many birds they see on the way to school, how many glasses of water they have, whether it is sunny or cloudy.

3. As a class group have students discuss how they are going to record what they see or find.

Hints: picture graphs or other simple tables and charts.

4. Tell students to record their daily observations.

5. Invite students to share their results with the class.</td><td>(1 week)

1. Provide students with a printed Map of Tasmania (provided under Unit 2).

2. Have students locate their town (or the closest town to their school).

3. Ask students to research and record the temperature of these towns and cities over a week.

Hints: watch the weather report each night, use websites such as Bureau of Meteorology:

www.bom.gov.au or other smartphone apps

4. Help students create simple tables to record their data next to the town or city.

5. Assist students to compare the results, namely the differences or similarities in temperature between the towns or cities.</td></tr>
<tr><td>HASS

Researching

Class Activity</td><td colspan="2">Class survey – weather monitoring

1. As a class have students brainstorm possible survey questions

Examples:
– Do you monitor the weather? (yes or no)
– Why do you monitor the weather? (for rain, for temperature, sport, other/comment)
– How do you monitor the weather? (television, website, smartphone app, other/comment)
– Do you monitor the weather at the same time each day? (yes or no, morning or night)

2. Ask each student to take the questions home and surveys a member of their household

3. Collate the responses into one class chart (this could be completed electronically)

4. Discuss and compare students' results</td></tr>
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Elaborate and review

As a class group review:

Why is monitoring important? Ask students:

- What can we learn from observing and recording information?
- How can we use this information to make decisions?
- How might it help to know differences and similarities?