Identifying coral type using the Coral Health Chart

The aim of this activity is to identify coral types using the Coral Health Chart.

ACARA curriculum links
Science understanding (ACSSU111)
Science inquiry skills (ACSIS125 & ACSIS126)
Science as a human endeavour (ACSHE119 & ACSHE223)

Instructions
- This activity should be conducted at low tide. Check tides timetable and plan this activity accordingly.
- Because identifying coral species is very difficult, CoralWatch classifies coral types in easy identifiable groups. For this purpose, coral types are described by the overall shape (‘growth form’) of coral colonies. There are hundreds of different coral species, each with unique shapes and colours. Sometimes the colour or shape may not clearly match the options on the Coral Health Chart. If it is difficult to select a colour or coral type, simply record the closest match. If a particular coral is too difficult to classify, just skip this coral and move on to the next one.
- CoralWatch classifies most free living, tabular, encrusting and foliaceous corals as plates.
- CoralWatch classifies most digitate, bushy and staghorn corals as branching.

Equipment
- Booties
- Hat, sunscreen and water bottle
- Coral Health Chart
- Waterproof slate or paper with pencil
- Underwater camera (if available)
- Viewing tube (if available)
- Waterproof ID guide (if available)
- ID reference books (if available)

How to Use the Coral Health Chart
1. Choose a coral and select the lightest area.
2. Rotate the chart to find the closest colour match.
3. Record the colour code on a data slate.
4. Select the darkest area of the coral and record the matching colour code.
5. Record the coral type.
6. Continue your survey with other corals. Record at least 20 corals.
7. Submit your data using the CoralWatch Data Entry Apps or enter online at www.coralwatch.org.

Survey Methods include
- Random Survey – Select corals randomly, such as the closest coral after every second fin kick.
- Transect Survey – Select corals by following a line (transect) and record every few meters.
- Easily Identified Corals – Select corals you can recognise and return to (permanent transect).

Tips
- Corals are fragile animals, make sure your survey has no affect on marine life.
- Due to colour loss at depth, use a torch when diving below 5 metres/15 feet.
- Avoid measuring growing tips of branching and plate corals since they are naturally white.
- Do not monitor blue or purple corals because they have a different bleaching response.
- Some corals are naturally lighter than others. Regular surveys are needed to look at coral health over time or pick up trends of bleaching and recovery.
Using the **CORAL HEALTH CHART** is easy

The Coral Health Chart records changes in coral colour, and provides a simple tool for people to monitor coral colour as an indicator of coral health.

**Steps to take**

1. Choose a random coral and select the lightest area.
2. Rotate the chart to find the closest colour match.
3. Record the colour code on a data slate.
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Avoid measuring growing tips of branching and plate corals since they are naturally white. Do not monitor blue or purple corals because they have a different bleaching response. It’s simple; only choose corals with colours that approximately match the chart.

**CORAL TYPES - just 4 to choose from**

Coral types are described by the overall shape (growth form) of coral colonies. Using the Coral Health Chart select the following four coral types or record what you think is the closest.

- **Boulder (BO)**
  - Any massive or rounded coral, such as some Porites species.

- **Branching (BR)**
  - Any branching coral, such as some Acropora species.

- **Plate (PL)**
  - Any plate-like shape coral, such as tabular Acropora species.

- **Soft (SO)**
  - Any corals lacking a hard skeleton, such as Sarcophyton species.
FREE LIVING

Fungiidae sp.

DIGITATE

Acropora sp.

Pocillopora sp.

ENCRUSTING

Goniastrea sp.

Hydnophora sp.

SOFT

Lobophytum sp.

Sarcophytton sp.
**Coral Growth Forms**

**Boulder (Massive)**
- *Platygryra* sp.
- *Porites* sp.

**Plate**
- *Acropora* sp.
- *Acropora* sp.

**Branching**
- *Acropora* sp.
- *Acropora* sp.

**Foliaceous**
- *Turbinaria* sp.
- *Pavona* sp.
Common coral genera of Heron Island Reef Flat

- Acropora
- Stylophora
- Pocillopora
- Isopora
- Porites
- Favites
- Montipora
- Goniopora

Heron Island Research Station - Kyra Hay
The Coral Health Chart uses four coral types to classify corals. **Branching** refers to any branching coral, such as Acropora and Pocillopora species. **Boulder** refers to any massive or rounded corals, such as brain corals and some Platygyra and Porites species. **Plate** refers to any coral that forms a plate-like shape, such as tabular Acropora species, and the **soft** category refers to corals lacking a hard skeleton, e.g. Sarcophytum species.

**Instructions**
1. Copy the coral type template on a waterproof slate.
2. Locate a coral colony, observe it and record the coral type. Use the types described on the Coral Health Chart.
3. Sketch the coral.
4. List any marine organisms that you observe near the coral.
5. Answer the following questions:
   a. Are there mainly soft or hard corals in your local area?
   b. In which zone do most corals appear to be?
   c. What is the most common coral growth form?
   d. What is the most common species of coral? Use your coral ID card.