Lesson overview

This lesson introduces students to the range of life on the reef. Starting off by learning to name and identify different species, students will then sort these into different groups and start to use classification keys. More advanced classes may want to devise their own keys.

Lesson steps

1. Grouping coral life (15 minutes)
   Introduce students to the idea of grouping living things based on observable characteristics and ask them to think about how to group coral life.

2. Grouping scientifically (15 minutes)
   Students then develop their understanding of classification by using a key to identify the scientific groups that different living things belong to.

3. Coral keys (20 minutes)
   Having used a key, students design their own key, designed to be used to identify different invertebrates on the reef.

4. Dive log (10 minutes)
   Students complete the lesson by identifying the scientific group for different living things they encounter on a virtual dive, before reflecting on their learning using a dive log.

Learning outcomes

• Understand that living things can be grouped based on observable characteristics
• Use scientific language to describe groups of living things
• Identify and name a variety of living things using classification keys to assign them to groups
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## Step Guidance

### Step 1
- **Guidance:** Step 1 introduces students to the idea of grouping coral life based on how different living things look, i.e. observable characteristics.
  - Review the learning objectives with the class using the slides.
  - Hand out a copy of the student sheet to each group.
  - Review the idea of grouping different living things using the slides.
  - Students then complete the activity by grouping the different coral life into groups they decide.
  - Review the activity by having students answer the questions on the sheet either individually or as a whole class discussion.

> The Coral life gallery can be used to support this activity if students have access to connected devices. Students may also use the living things created as part of their coral reef mural or coral reef in a box.

### Resources
- **Slideshow 4:** Slides 1-8
- **Student Sheet 4a:** Grouping coral life
- **Gallery:** Coral life

### Step 2
- **Guidance:** Step 2 develops students understanding of classification through using keys to group living things into scientific groups.
  - Hand out the student sheet and demonstrate how to use the key using the slides.
  - Students then work in groups to classify the same living things as in Step 1, but this time using a key to sort and group life according to scientific groupings.
  - Review the activity by having students answer the questions on the sheet either individually or as a whole class discussion.

### Resources
- **Slideshow 4:** Slides 9-10
- **Student Sheet 4b:** Classifying coral life

### Step 3
- **Guidance:** Step 3 sees students applying their understanding of classification keys and designing their own.
  - Continuing to work in groups, students work on the student sheet Coral keys.
  - Using the slides, remind students what makes a good key.
  - Students complete the work individually or in groups using the student sheet.

### Resources
- **Slideshow 4:** Slide 11
- **Student Sheet 4c:** Coral keys

Students could extend this activity by making a key for their coral reef mural or coral reef in a box if they have completed this.
### Step 4

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**Step Guidance**

Step 4 uses the format of a dive log for students to reflect on their learning.

- Using the 360 gallery Living reef, take students on a virtual dive. Options on conducting this as a front-of-classroom or individual tour are outlined in the subject update.
- Hand out copies of the dive log to each student and ask students to complete the descriptions of three animals they see.

**Resources**

- **Slideshow 4:** Slide 26
- **Student Sheet 4d:** Dive log
- **360 Gallery:** Living reef
- **Subject Update:** How to: Use Encounter 360