Weekend Marine Science

Art and Science
There are many beautiful aspects of the marine environment that can be the source for interesting art works. See some of the ideas below as well as things to think about as you consider the science involved in nature at work.

Flotsam and Jetsam
Walk along the beach collecting interesting pieces of flotsam and jetsam. Take care: some dangerous animals like blue bottles can get washed up on the beach, sea urchin spines can pierce your feet so wear shoes and be careful what you pick up.

Don’t take your collection home – use the sand as your canvas and get creative. Arrange seaweed, shells, drift wood, and other items in an interesting, artistic way. Sculpt the sand around it to create a border or frame, press things into the sand to change the texture, use different coloured sand or shells to effect, add water to dampen the sand in some places so you can mould it. You should have the idea by now.

Take a photo to share your artwork with friends or to preserve the memory.

Now put your science hat on and start asking questions:
What is the sand made of? Look at the colour and its components using a hand lens, magnifying glass or microscope if you have access to one. Are all the pieces the same? Where do you think they came from? How does sand form? Why doesn’t it get mixed in with the seawater like salt does?

What is your artwork composed of? How many of the parts are natural? How many are artificial? Where did the bits come from and how did they get there? What shaping and joining methods did you use to make your artwork? If you went to another beach would you expect to find all of the same things? Why or why not?

Cliff scapes
Find a beach that has a rock platform that you can walk along safely to observe the cliff faces. Be sure to check the sea conditions, avoid dangerous weather and follow signs that may warn of unstable cliffs or falling rocks. Take the time to observe the colours and textures of the surrounding rocks. Some cliffs have stunning shapes and colours where the different rock types meet and have been affected differently by the harsh winds and waves that batter them about. The unique shapes, colours and textures of cliff faces can provide wonderful inspirations for art work, especially as they change colour with changes in light at different times of the day. Use your observations to create an artwork that encapsulates the marvels of nature on display in ocean cliffs.

Now put your science hat on and start asking questions:
How many different rock types did you see on your cliff walk? Which of the rock types were hard and which were soft? If you saw any circular shaped pot holes, what do you think may have caused them? Did you see any formations or patterns in the cliff that looked like ripples in the sand? How do you think they got there? If you were to look for fossils, which of the rock types would you choose to look at?