

## Marine Science: NOAA- Tides

Go to: <http://www.montereyinstitute.org/noaa/>

### Tides

Name: \_\_\_\_\_

Answer the following questions (*put onto your website*)

- 1: What are **tides**?
- 2: What **causes** tides? Explain in detail (*show diagram*)
- 3: Where do **tides occur**?
- 4: **Explain-** High and low tides (difference)
- 5: **Which object** exerts the most force on the tidal bulge? *Why?*
- 6: What happens when the sun and moon **align**? What happens when they are **perpendicular** to each other?
- 7: What are some of the **other factors** that affect tides?
- 8: What are the **zones of the intertidal zone**?
- 9: What are some of the **challenges** for the critters of the intertidal zone? **Explain.**
- 10: How do the intertidal organisms COPE with the harsh environment?
- 11: What are some of the adaptations that help organisms cope with wave action?

### **Do: Predicting the Tides**

Answer the questions with the animations- post on your website with diagrams and descriptions

### **Do: Life in the Intertidal Zone**

Answer the questions with the animations- post on your website with diagrams and descriptions

### **Global Impact**

What is the *global impact of tides*? **Explain.**

What are some of the challenges on coastal areas because of tides?

**Explain** how electricity can be generated by currents and tidal power.