

Name: _____ Period: _____ Date: _____

Sifting Sanctuary Sands

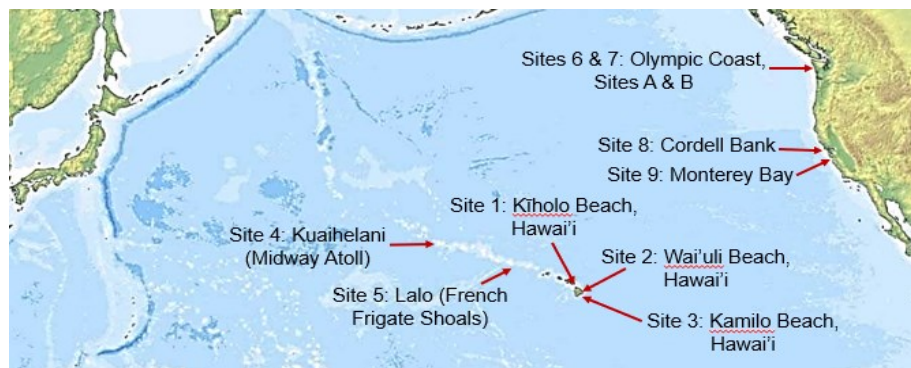


What can close observations of sand teach us? Record ideas below or in science notebooks.

1. How would you classify sand from each sample?

Sample #	Site Name	Color(s)	Grain Size	Shape Rounded, Angular or Mixed	Source Rock or Biological? Rock type?
1	Kiholo Beach, Hawai'i Island				
2	Wai'uli Beach, Hawai'i Island				
3	Kamilo Beach, Hawai'i Island				
4	Kuaihelani (Midway Atoll)				
5	Lalo (French Frigate Scholls)				
6	Olympic Coast, WA Site A				
7	Olympic Coast, WA Site B				
8	Cordell Bank, CA				
9	Monterey Bay, CA				

Mapped Locations



Wentworth Grain-Size Scale

Diameter	Name
>256 mm	Boulder
64–256 mm	Cobble
4–64 mm	Pebble
2–4 mm	Granule
0.06–2 mm	Sand

Sand Grain-Size Scale

Sand Grain Size	Name
0.5–2 mm	Coarse sand
0.25–0.5 mm	Medium sand
0.06–0.25 mm	Fine sand
0.0039–0.06 mm	Silt
< 0.0039 mm	Clay

2. Based on your photo observations, how do you think each type of sand was created?

Site	Ideas about how each sand sample was created and added to the beach
1. Kiholo Beach, Hawai'i Island	
2. Wai'uli Beach, Hawai'i Island	
3. Kamilo Beach, Hawai'i Island	
4. Kuaihelani (Midway Atoll)	
5. Lalo (French Frigate Scholls)	
6. Olympic Coast, Site A	
7. Olympic Coast, Site B	
8. Cordell Bank	
9. Monterey Bay	

3. What **forces** are at work that affect the composition of sand and how much or little is observed? Record your ideas below or in science notebooks in words and pictures.

4. What do you know about the **rock cycle**? Describe the rock cycle in science notebooks or on separate paper in as much detail as possible using words and illustrations.