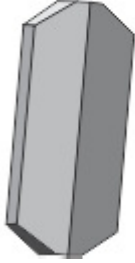


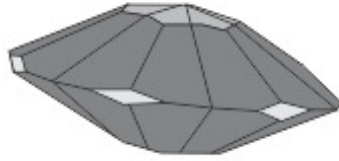
CHARACTERISTIC #1 - CRYSTAL HABIT

Crystal habit has to do with shape of a crystal. You should focus on the whole otolith though most of the crystal structure will be in the “core” of the otolith. Below are the habits and pictures of the “ideal” shape.

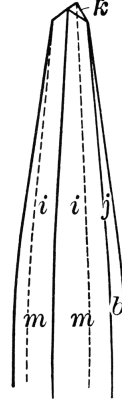
Orthorhombic



Hexagonal



Acicular



acrystalline

No
obvious
crystals

Amorphous

Small
“blubs” of
material

To Score the images, identify the DOMINANT habit:

1 = orthorhombic

2 = acicular

3 = hexagonal

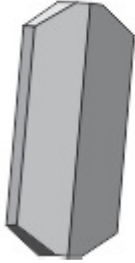
4 = acrystalline (no crystals)

5 = amorphous

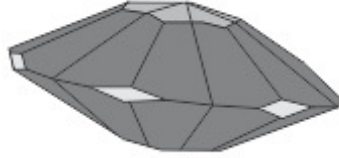
CHARACTERISTIC #2 – MINEROLOGY

Here we will use crystal habit to identify relative percentages of minerals using the following key:

Aragonite



Vaterite



Score images as follows:

1 = completely aragonite

2 = vaterite $\leq 33\%$

3 = vaterite 33% to 66%

4 = $\geq 66\%$ vaterite.

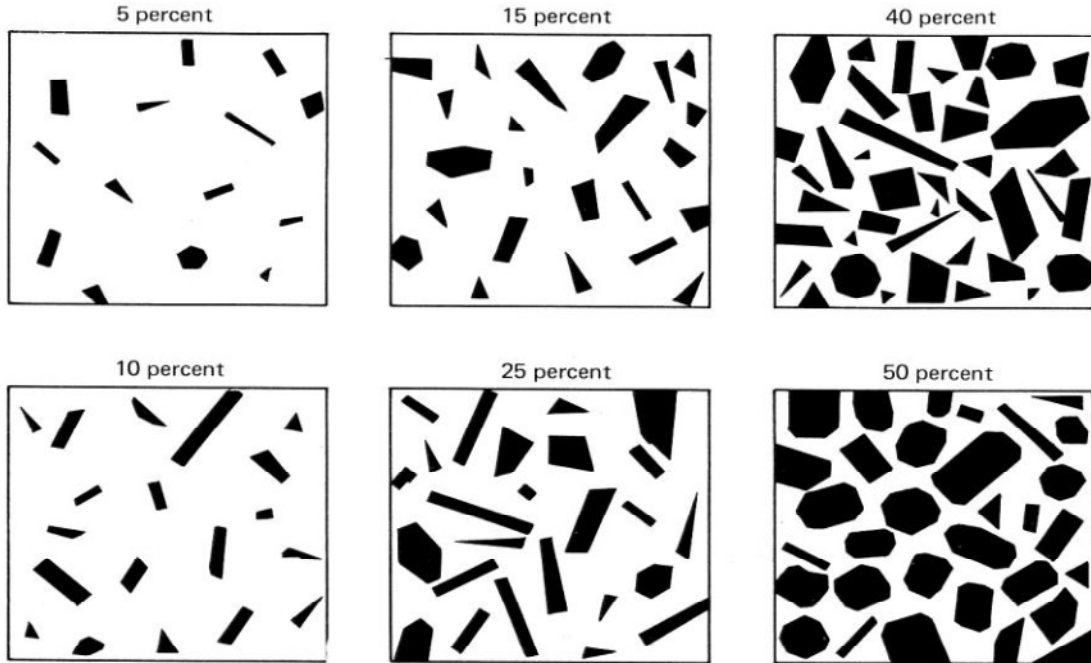
5 = no visible crystals

CHARACTERISTIC #3 - % VISIBLE MINERALS

Using your best estimate, what is the relative % of visible crystals? Enter into Box.

ESTIMATING PERCENTAGES

Below are images with the relative % of dark material noted. When you look at these figures examine the balance of white space to dark space use the balance to estimate % dark.



Using the above figure as an example you will be asked to evaluate the % of a particular characteristic in images of fish ear stones (otoliths).

CHARACTERISTIC #4 - CORE DEVELOPMENT

Rank core crystal development using the scheme shown below (1-5)

