

Name _____ Date _____

Which Microscope?

You are a scientist working in a lab studying marine microorganisms. Your team has found samples of several types. In the table below is a list of the microorganisms and the size of each.

| Name | Size (in meters) |
|------------|------------------|
| Protists | 0.00275 |
| Archaea | 0.000062 |
| Copepods | 0.003 |
| Microfungi | 0.000159 |

Your team needs to study these microorganisms under a microscope. There are several different microscopes in your lab and each one has a different depth of focus (range in which objects can be focused and sharp).

Microscope A has a depth of focus of 7.5×10^{-5} to 2.5×10^{-3} meters.

Microscope B has a depth of focus of 8.0×10^{-6} to 4.0×10^{-3} meters.

Microscope C has a depth of focus of 4.9×10^{-6} to 2.9×10^{-3} meters.

Which microscope should your team use to study the samples? Provide evidence and explain your reasoning.