**Bozeman Biology**

**Tour of the cell video**

[**http://bit.ly/RBvs31**](http://bit.ly/RBvs31)

Why are cells small?

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Why aren’t cells infinitely small?

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What does the cytoskeleton look like and how does it function?

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What helped scientists discover cells?

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What are the two different types of microscopes?

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What is do optical microscopes use for illumination and focusing?

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What do electron microscopes use for illumination and focusing?

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What are the two different types of electron microscopes?

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What is the function of magnets in the electron microscopes?

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What do fluorescent optical microscopes use to make cells stand out?

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What are the two types of cells?

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What are the characteristics of prokaryotic cells?

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What types of cells are prokaryotic? Why are they different from eukaryotes?

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Examples of eukaryote cells: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What organelle do prokaryotic cells resemble in size? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are the similarities between prokaryotes and eukaryotes

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List the major organelles and their structures, functions and locations (if any)

Nucleolus (describe function)

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Nucleus :

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Nuclear pores:

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Ribosomes:

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Vesicle:

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Rough Endoplasmic reticulum

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Golgi body:

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Cytoskeleton

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Smooth Endoplasmic reticulum

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Mitochondria

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Vacuole:

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i. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ii. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

iii. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cytosol

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Lysosome

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Centriole

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What is the membrane of the vacuole called?

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**Watch this animation by Harvard animators on the inner life of the cell.**

[**http://bit.ly/TYIhGR**](http://bit.ly/TYIhGR)