

6: INSIDE A CELL

What does a cell look like from a virus's viewpoint?

What materials and tools are available?

Where are the best locations to work?

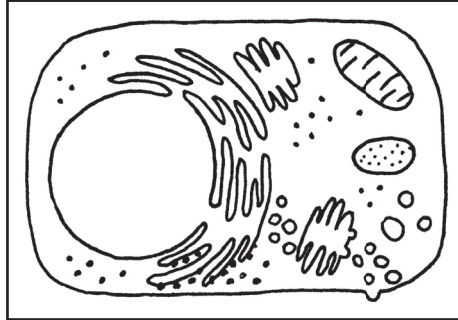
Are there any dangers?

Will the cell's neighbors find out that I'm here?

CELL "MAP" showing organelles



DNA library



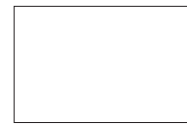
copy machines

Endoplasmic Reticulum: makes lipid membrane

Mitochondria: power plant making ATP

Lysosome: recycling (BEWARE!)

Vesicles and endosomes are like bags and boxes



Ribosome: protein factory

Golgi bodies: processing and shipping

RAW MATERIALS	TOOLS/"TASK ROBOTS" (need energy)	STRUCTURES
<p>Most structures in our environment are made from metal, glass, plastics, and plant fibers. Cells have 4 basic materials that all their stuff is made of.</p>	<p>They are usually made of protein but can have one of the other ingredients mixed in. Tools/robots can only operate on ONE type of molecule.</p>	<p>Not all cellular structures are similar to the structures in our own environment but a surprising number are.</p>
0)		<p>cables</p>
1)		<p>string</p>
2)	<p>scissors staplers folders</p>	<p>hooks flags anchors</p>
3)		
4)	<p>editors fixers pumps (spell checkers)</p>	<p>mailboxes letters labels</p>
		<p>LIPID</p>
INSTRUCTIONS	<p>vehicles shredders</p>	<p>walls bags tubes</p>
		<p>The energy to run these tools comes from the cell's "rechargeable batteries."</p>
	<p>copiers</p>	<p>Energy is released when the third phosphate is popped off. Energy is needed to put it back on.</p>
	<p>keys</p>	
	<p>clips</p>	