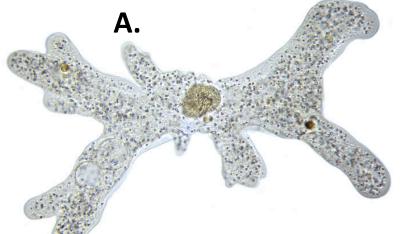
#### Lesson 1.3 Self-paced study

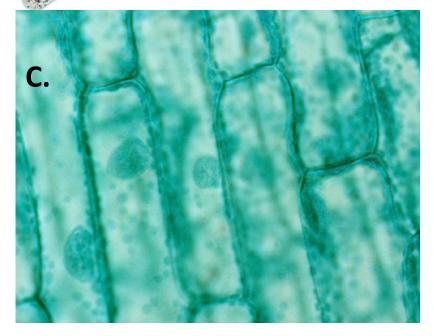
All work should be recorded on pages 6 and 7 in your Science Notebook

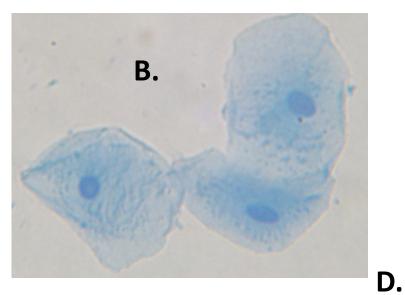
### Think

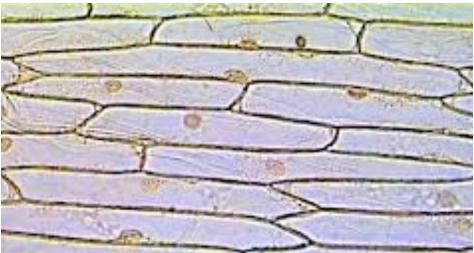
1) If you were going to look inside the body for something that makes traits show up like they do in humans and living things, where would you look? Why? 2) What do you know about what is *inside* humans, plants and other living things that enables organisms do the work of living?

## 3) What structures do these cells have in common? List (or describe) them!









# 4) Match cells on previous slide to organism below? Clues? Traits?



Elodea (aquatic plant)



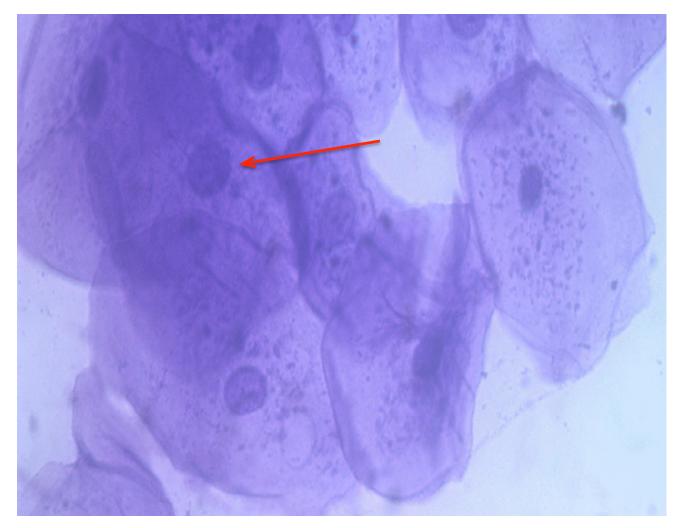
Onion Bulb

Human

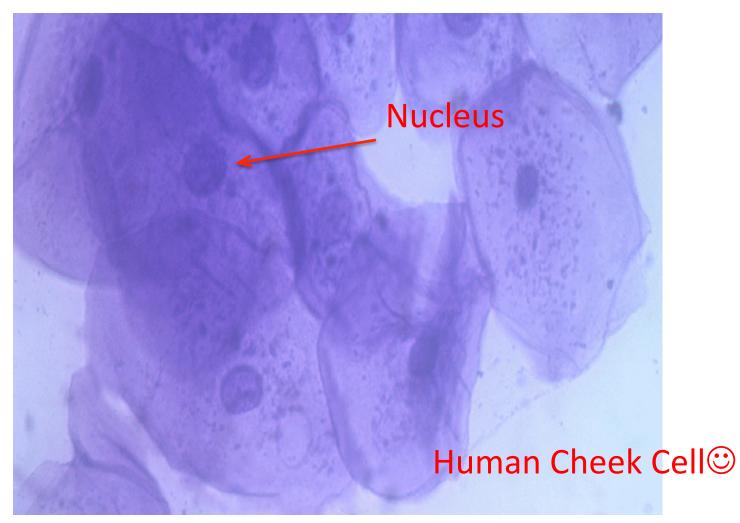




## 5) What are the dark staining structures in the cell?

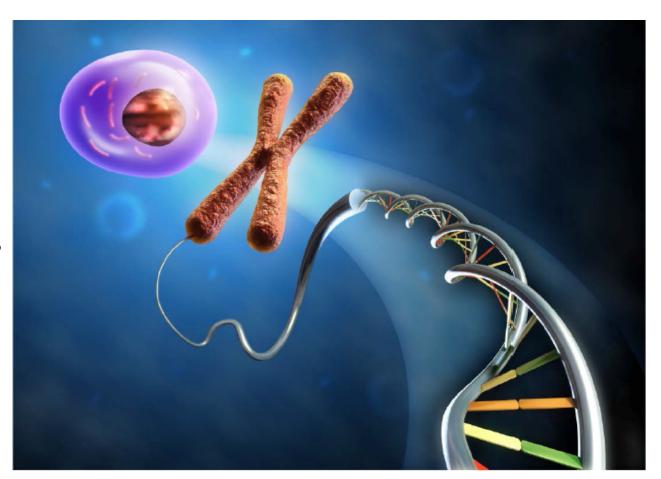


## 6) What is found inside the nucleus in the cell?

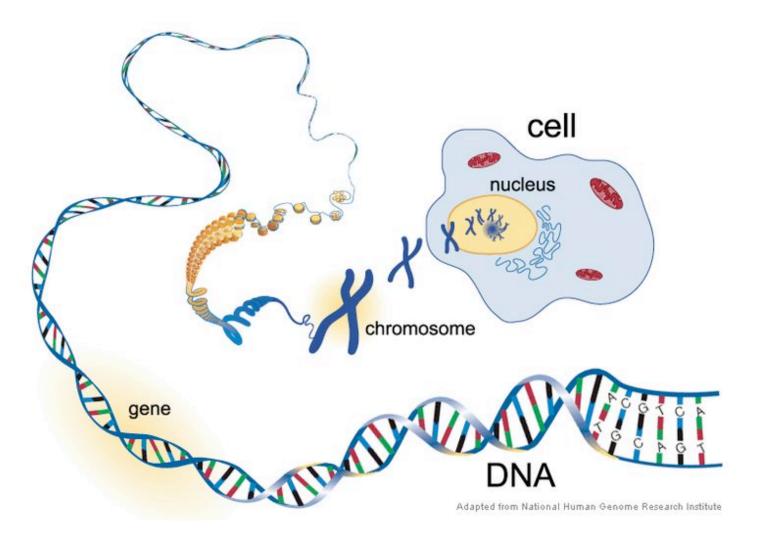


#### When technology improved....

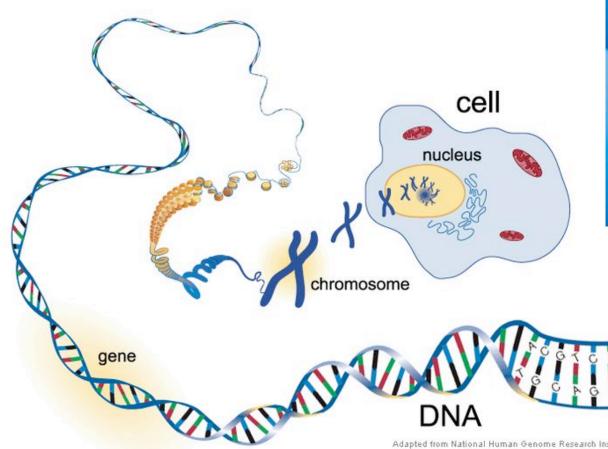
Scientists observed stringy stuff in the nucleus. DNA was the "stuff."



7) What do you think this diagram was made to show? Start inside the nucleus and work your way out. Explain fully.



8) At this point, what do you think DNA, genes, and chromosomes have to do with traits?





Adapted from National Human Genome Research Institute

#### Reading Directions p. 8-11

ONE paragraph at a time—do the following:

- Skim silently once—no writing!
- As you read paragraph a second time circle vocabulary words—try to pick out the science words for circling, look up the non-science words you need.
- Underline ONE main idea per paragraph, two if you can't decide on only one <sup>(C)</sup>!
- Answer questions in the boxes.