

Name:

Date:

Class:

Post-Activity Assessment **Answer Key**

1. What does the shower ring represent?
The ECM
2. Which nuclei had the most whole hydrogels after passing through?
Should be the "0" balloon
3. Explain the results in terms of stiffness and stress.
The "10" balloon was the stiffest, since it had the most pasta in it, which increased the stress when passing the balloon through the shower ring (ECM)
4. Based on the article "Cancer Cells with Trapped Nuclei Cut Their Way through the ECM", which cell is most likely to be the cancer cell and why?
The 10, it has higher lamin concentration and is stiffer.
5. Design an experiment that tests the stress when the nuclei are constant stiffness, but the extracellular matrix has a variable stiffness.
Answers will vary, should make sense and have only one variable testing-idea includes passing the cell through varying rings.