

**Student handout: Cell cycle physical quiz and rubric.**

In your group, you will act out the cell cycle for the class, using the chromonoodles. Everyone must participate. You must first write a script, which you will turn in at the end of your play. Assign one group member as the narrator to read the script during your play. The narrator is the only person allowed to talk during your demonstration; the rest of the group will act out the script. You may use props to help emphasize a particular structure. Be creative and have fun!

After each group has given their demonstration, you will take an individual written quiz on the cell cycle. Be active in your learning and help your group!

Your script must include the following terms:

- cell cycle
- mitosis
- cytokinesis
- prophase
- metaphase
- anaphase
- telophase
- interphase
- haploid
- diploid
- chromosome
- gene
- allele
- chromatids
- sister chromatids
- homologous chromosomes
- centromere
- spindles
- G<sub>1</sub>
- G<sub>2</sub>
- S

The following rubric will be used to grade the play:

	<b>1 point</b>	<b>2 points</b>	<b>3 points</b>	<b>4 points</b>	<b>5 points</b>
<b>Follow the script</b>	Group members are unsure what to do a total of four times.	Group members are unsure what to do a total of three times; a lack of creativity is demonstrated.	Group members are unsure what to do a total of two times; little creativity is demonstrated.	Group members are only unsure what to do once; some creativity is demonstrated.	Group members easily follow the narration; creativity is evident.

<b>Phases of cell cycle (G<sub>1</sub>, S, G<sub>2</sub>)</b>	No representation of G <sub>1</sub> , S, or G <sub>2</sub> .	Three phases are not represented correctly.	Two phases are not represented correctly.	One phase is not represented correctly.	All phases are represented correctly.
<b>Phases of mitosis/ cytokinesis</b>	Four phases are not represented correctly.	Three phases are not represented correctly.	Two phases are not represented correctly.	One phase is not represented correctly.	All phases are represented correctly.
<b>Vocabulary</b>	Script is missing more than 10 vocabulary terms.	Script is missing between eight and ten vocabulary terms.	Script is missing between five and seven vocabulary terms.	Script is missing between two and four vocabulary terms.	Script is missing one or no vocabulary terms.
<b>Total points</b>					<u>    </u> /25