

Block 1

Q1. Do you expect to see connections between what you learn in this course and your other science courses?

- ☐ Yes, lots of connections
- ☐ Yes, some connections
- ☐ Yes, a few connections
- ☐ No, no connections

Default Question Block

Q2. To be successful in this course, I don't expect to have to bring in ideas from my biology or chemistry courses.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3. Time should not be taken out of biology courses to present physics.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4. Time should not be taken out of physics courses to present biology.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5. My biology background helps me do problems in physics class.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6. It is beneficial to me, as a biologist, to also be proficient in physics.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7. Ideas I learned in physics are rarely useful in biology.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8. Physics helps me make sense of biological phenomena.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q9. Ideas I learned in biology are rarely useful in physics.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q10. Physics is largely irrelevant for understanding biological processes.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q11. Mathematics helps me make deeper sense of biological phenomena.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q12. Math provides another way of describing biological phenomena, but rarely provides a deeper or better understanding.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q13. Ideas I learned in math are rarely useful in biology.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q14. We use this statement to discard survey respondents who are not reading the questions. Please select "Agree" for this question to preserve your answers.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q15. It is beneficial to me, as a biologist, to also be proficient in math.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q16. Equations help me make deeper sense of biological phenomena.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q17. Equations are rarely useful in biology.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

**Q18. Numerical calculations are rarely useful in biology.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q19. Numerical calculations help me make deeper sense of biological phenomena.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q20. Equations help me make deeper sense of physical phenomena.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q21. Equations are rarely useful in physics.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q22. Numerical calculations are rarely useful in physics.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q23. Numerical calculations help me make deeper sense of physical phenomena.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q24. Simple models are useful in physics.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q25. Simple models are useful in biology.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q26. To help you solve a problem in physics, you sometimes need to leave out details.**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q27. To help you solve a problem in biology, you sometimes need to leave out details.**

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Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

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**Q28. Most biology ideas are too complex to describe with an equation.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

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**Q29. Most physics ideas are too complex to describe with an equation.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

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**Q30. Most simplifications in physics are done without a good reason.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

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**Q31. Most simplifications in biology are done without a good reason.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

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**Q32. When I make a simplification in a physics problem, I want there to be justified good reason for doing so.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐

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**Q33. When I make a simplification in a biology problem, I want there to be a good reason for doing so.**

Strongly Disagree

☐

Disagree

☐

Neither Agree nor Disagree

☐

Agree

☐

Strongly Agree

☐