name date period

**Bozeman Biology: Signal Transduction Pathways**

<http://www.bozemanscience.com/038-signal-transduction-pathways> (9:24)

1) What do signal transduction pathways in cells do?

2) What is a phosphorylation cascade?

3) What is transduction?

Mr. Anderson discusses the signal transduction pathway of epinephrine in liver.

3) What is epinephrine?

4) What receptor does epinephrine dock with?

5) What is a ligand?

6) What is a G protein?

7) What happens when the ligand docks with the G protein?

8) What activitates Adenylyl cyclase?

9) What does Adenylyl cyclase do?

10) What is the secondary messenger that is produced?

11) What is a protein kinase?

12) What is the structure of the protein kinase that cAMP binds to?

13) How does the cAMP interact with the protein kinase?

12) What happens to the catalytic portions of the protein kinase?

13) What happens when phosphorylase gets activated?

14) What occurs when the ligand is no longer bound to the receptor?

15) How is the message amplified?