CELL ENERGY STUDY GUIDE

PHOTOSYNTHESIS REVIEW

| Mo | atch the terms below with the corre | ect description |
|----------------------------------|---|---------------------------------------|
| Cr | nlorophyll | Light-independent reactions |
| Ch | nloroplast | (DARK REACTION) |
| Light-dependant reactions (LIGHT | | |
| | ACTION) | • |
| | • | |
| | energy-capturi | ng portion of photosynthesis that |
| | takes place in thylakoid membrar | nes of chloroplasts and cannot |
| | proceed without solar energy, it produces ATP and NADPH | |
| b. | green pigment | that absorbs solar energy and is |
| | important in photosynthesis | |
| c. | membrane-ba | ounded organelle with chlorophyll – |
| | containing membranous thylakoids; where photosynthesis takes place | |
| d. | Process usually | occurring within chloroplasts |
| | | nergy and carbon dioxide is reduced |
| | to a carbohydrate. | 9, |
| e. | , | on of photosynthesis that takes place |
| | in the stroma of chloroplasts and does not directly require solar energy; | |
| | it uses the products of the light dependant reactions to reduce carbon | |
| | dioxide to a carbohydrate | |
| | aloxido lo a carbonyararo | |
| An | swer the following questions | |
| | . | utotrophs and heterotrophs. Give two |
| | amples of each. | |
| | | |

2. Draw a picture of a molecule of ATP and an ADP molecule (make sure to KNOW the differences between these models). ALSO Label: adenosine, ribose, and phosphate groups. Also show the chemical bond that would be broken if energy needed to be released.