

Student Name: \_\_\_\_\_

Period: \_\_\_\_\_

Date: \_\_\_\_\_

**Directions:**

1. Discuss the questions below in your team – use your notebook and notes!
2. Answer each question based on what you and your team decide is the best response.

List the 7 resources of technology.

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

In the space below, calculate the efficiency of a bridge that has a dead load of 25 grams and a live load of 5 kilograms.

|                                 |  |                          |
|---------------------------------|--|--------------------------|
| 1. Write formula for efficiency | 2. Substitute quantities (in formula for efficiency) | 3. Calculate (show work) |
|                                 |  |                          |

In the space below, calculate the efficiency of a bridge that has a dead load of 60 grams and a live load of 15 kilograms.

|                                 |  |                          |
|---------------------------------|--|--------------------------|
| 1. Write formula for efficiency | 2. Substitute quantities (in formula for efficiency) | 3. Calculate (show work) |
|                                 |  |                          |

In the space below draw a diagram that shows the different steps and order of the design cycle. Use arrows to show the sequence of steps.

Identify a system and list 4 of its subsystems.

|         |            |            |
|---------|------------|------------|
| System: | Subsystem: | Subsystem: |
|         | Subsystem: | Subsystem: |

To raise money for an after school program, your tech class going to make and sell wooden toys. Your school has a lot of wood available and your tech classroom has lots of tools and machines for student use. Your class is going to use the design cycle to solve this problem. List each step of the design cycle and write a brief sentence or two describing what will be done at each step.

|                             |  |
|-----------------------------|--|
| Design Cycle Step:<br>_____ | Describe what will be done in this step: |
| Design Cycle Step:<br>_____ | Describe what will be done in this step: |
| Design Cycle Step:<br>_____ | Describe what will be done in this step: |
| Design Cycle Step:<br>_____ | Describe what will be done in this step: |
| Design Cycle Step:<br>_____ | Describe what will be done in this step: |