

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

## Part I. The Captain Tour- A Virtual Visit to a North Sea Oil Platform

### **Introduction**

1. How many barrels of oil does the Captain Rig produce in a day?

### **Helicopter Deck**

2. How often do helicopters arrive at the Wellhead Protection Platform (WPP)? What do the helicopters bring? How many people can the helicopter carry?

### **Accommodation (Mess and Galley)**

3. How often does the supply boat bring fresh provisions for the galley?

### **Drill Deck**

4. What material is used to make the drill bits so they can drill through the cap rock?

### **Drill Control Room**

5. The instruments in the drill control room monitor what type of drill measurements?

### **Well Heads**

6. What is the purpose of all the pipes at the well heads?

### **Chemistry Lab**

7. What tests does the chemist perform on the crude oil samples?

### **Walkway to Bridge**

8. What do divers attach to the base of the platform legs so that steel won't corrode.

### **Bridge Link (Middle of Bridge)**

9. The bridge links what two platforms?

**Top of Bridge Linked Platform (BLP)**

10. What is the main purpose of the BLP?

**Control Room**

11. What is the work schedule like for a typical platform worker?

**Floating Production Storage and Offtake (FPSO) Vessel**

12. What is the main purpose of the FPSO vessel?

---

**Part II. The Fawley Tour: A Virtual Visit to Fawley Oil Refinery****Introduction**

1. The Fawley oil refinery convert crude oil into what valuable products?

**South End of Jetty**

2. What is the purpose of the jetty? How many tankers come here every year?

**Jetty Control Room (Jetty Control Block)**

3. How often is there someone on duty in the jetty control room? How long may it take to unload a tanker?

**Salt Marsh**

4. Why was the salt march almost dead 50 years ago? What did scientists do to bring the salt marsh back to health?

**South Trestle**

5. What happens at the South trestle? What happens at the North trestle?

**Admin Block Roof**

6. How can engineers in the admin office control valves around the refinery?

**Storage Tank (#307 on 2<sup>nd</sup> Street)**

7. How big are the largest storage tanks? What type of roof does the storage tank have? Why is this type of roof so important?

**Perimeter Tank (#329)**

8. What features insure the safety of the storage tanks?

**Fawley Village**

9. What has the Fawley refinery done to keep the residents of Fawley Village safe and happy?

**Combined Heat and Power Generation (COGEN)**

10. The heat and power produced by the COGEN plant is used to do what?

**Bund by Steam Plant 4 (SP4)**

11. What is a bund? What does it do? Who used to cut the grass on the bunds?

**Gate 1**

12. For safety, what materials may visitors not bring into the refinery? For safety, visitors may have to wear what type of safety equipment?

**Hythe Terminal (Road Tanker Terminal)**

13. Petroleum products can leave the Fawley refinery through pipelines or on tanker trucks. What fraction of Fawley products leave by road?

**Fire Station Roof**

14. Because it is better to prevent an accident than fix an accident, how much of a worker's time is spent thinking about safety? What helps workers always keep safety at the front of their minds?

**Pipe Farm**

15. How many gallons of finished products travel through the pipelines every day? Because bitumen is too thick to travel through pipes, how is it transported? What percentage of products leave the Fawley refinery by pipeline?