**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (1,2) Date:\_\_\_\_\_\_ Pd.\_\_\_\_\_\_(3)**

**THE COST OF WATER – IDM SCAFFOLDING NOTES**

**Directions: Use the word bank at the bottom of the second page to fill in the blank(s) with the correct answer. Some answers may be used more than once. You will fill enter the fill-in response in the forms.**

 **Water is the most precious resource on our planet, but not all water is drinkable. Access to water varies by country and geography. It is not \_\_\_\_\_\_\_\_\_ ( 4 ) \_\_\_\_\_\_\_\_\_ (available to everyone) in the Middle East. The Climate in SW Asia (the Middle East) is hot and dry. Water is \_\_\_(5)\_\_\_. The water that is available is getting even harder to share. The Total Cost of Water is getting higher every year because of \_\_\_\_\_\_\_\_(6)\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_(7)\_\_\_\_\_\_\_\_, and consequences from \_\_\_\_\_\_\_(8)\_\_\_\_\_\_\_ damage and conflict.**

 **Access to water is key to survival in SW Asia – The Middle East. Coastlines, Rivers, and Lakes are where most \_\_\_\_\_\_(9)\_\_\_\_\_\_\_ live. Wells can be dug or drilled deeply in rural areas, but there must someone with knowledge of where water would be (\_\_\_\_\_(10)\_\_\_\_\_).The countries of \_\_\_\_\_\_(11)\_\_\_\_\_\_ and \_\_\_\_\_(12)\_\_\_\_\_ have shared the river Jordan’s water for centuries. But today, the river water is very low and underground wells are not receiving the \_\_\_\_\_(13)\_\_\_\_\_\_ water to refill them. People move to modern cities where most water is available. Israel has spent 2 billion dollars building \_\_\_\_\_(14)\_\_\_\_\_\_ plants. They have also used technology to treat and reuse \_\_\_\_\_(15)\_\_\_\_\_\_ water for crops after people have flushed it down the drain. As a result, Israel can sell water to Jordan. Saudi Arabia has spent its’ oil money improving the \_\_\_\_\_(16)\_\_\_\_\_\_ of \_\_\_\_(17)\_\_\_\_\_ for its’ citizens by using desalination to provide water its cities desperately need. Turkey is more fortunate. It has a Mediterranean climate and rainfall in its eastern mountains that provide water. The \_\_\_\_\_(18)\_\_\_\_\_\_ and \_\_\_\_\_(19)\_\_\_\_\_ rivers begin in Turkey. Building Dams to create storage lakes in Turkey and Syria has reduced the amount of fresh water that flows southeast into \_\_\_\_\_(20)\_\_\_\_\_\_.**

 **The use of technology helps countries in the Middle East obtain the water they need. Only \_\_\_­(21)\_\_\_ of the earth’s water is “fresh” and the rest is saltwater. \_\_\_\_\_\_(22)\_\_\_\_\_\_\_ is removing salt(s) from sea/ocean water to make it drinkable. The process of \_\_\_\_\_\_\_\_\_\_\_\_\_ (23) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ purifies water using a semi-permeable membrane (filters) and energy (electricity) to separate out the salt and remove the fresh water so it can be used. Not everyone can afford these methods. \_\_\_\_\_\_\_ (24) \_\_\_\_\_\_\_\_\_ and ­\_\_\_\_(25)\_\_\_\_ have invested billions of dollars to get the water they need to build tourist areas to welcome religious pilgrims (Mecca) and the rich to ensure their future GDP. Israel has become more self-sustaining converting the Mediterranean Sea to water it can use even profit from. However, not all SW Asian countries have crude oil to sell or high-tech services, like cutting diamonds to make tools or electronics for defense. Syria, as well as parts of Iraq and Iran are torn by religious/civil war. Some simply don’t have the \_\_\_\_\_\_\_ (26) \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ ($) to pay, and people who live there become refugees as these countries dry-up.**

 **Finally, the highest “cost” of accessing water in the Middle East is coming from a combination of man’s impact on his environment and conflict against his neighbors. Industrialization, and construction of infrastructure (covering the desert with roads and buildings) release \_\_\_\_\_\_\_(27)\_\_\_\_\_\_\_\_ into the environment. Little rain and damming rivers diverts water away from underground water tables causing some villages in Iran to be abandoned. Growth of cities due to \_\_\_­\_\_\_(28)\_\_\_\_\_\_\_ of people, has forced countries to spend funds on desalination that could be spent on food and healthcare. \_\_\_\_\_(29)\_\_\_\_\_\_ is defined as a disagreement or argument between 2 people or groups of people. Dams on the Tigris and Euphrates rivers have been the scene of war between Syrians, Turks, Kurds, and ISIS (the Islamic State-a rebel group) over the last decade. In 1991, Kuwait was invaded by Iraqi troops, who destroyed desalination plants and took control of the countries oil until the U.S. intervened. In 2017, the Israelis cut water pipelines to Palestinians in the West Bank to force their “cooperation.” Destruction brought by war is not always rebuilt in peace.**

 **The Total Cost Of Water is due to lack of \_\_\_\_\_\_\_(30)\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_(31)\_\_\_\_\_\_\_\_\_, the consequences of \_\_\_\_\_\_\_\_\_(32)\_\_\_\_\_\_\_\_\_ damage and conflict. Peace must come to SW Asia, so destruction can be repaired, technology can be built, and water resources can be shared. The Middle East is already in a “water crisis” and the rest of our planet is not far behind. We must refine, recycle and/or reuse our available water so that our earth’s people can prosper.**

 **WORD BANK:**

**Conflict pollution Gross Domestic Product Saudi Arabia Dubai scarce**

**Reverse Osmosis desalination Iraq Tigris Euphrates ground water**

**Standard of Living Israel Jordan Geology Accessibility Technology**

**Environmental people equally distributed waste 3% migration**