

Crude oil and fractional distillation

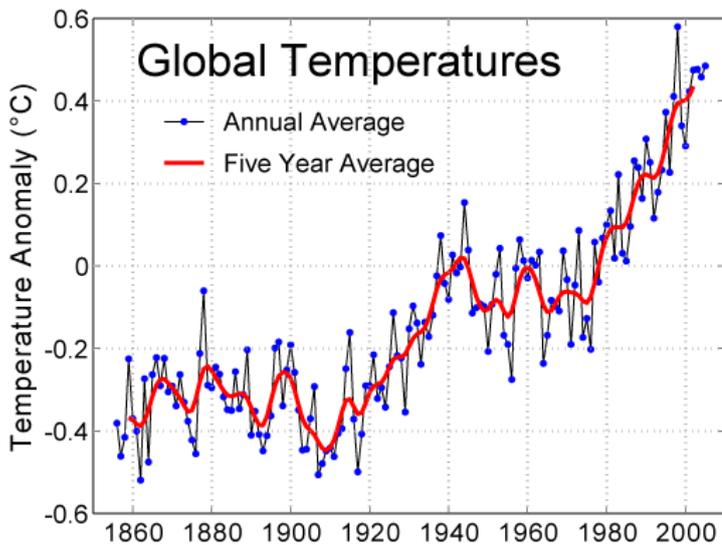
Select the correct answer from the text below each question:

1. Compounds that contain only carbon and hydrogen atoms are called...
carbohydrogens hydrocarbons carbides carbohydrates
2. A _____ consists of two or more elements or compounds that are not chemically bonded together.
molecule compound nucleus mixture
3. _____ is a mixture of hydrocarbons.
Methane Brine Crude oil Water
4. Crude oil is a thick, smelly dark brown liquid. Before it can be used it must be separated into _____.
fractions test tubes hydrogen and carbon
5. Distillation can be used to separate a pure liquid from a mixture of liquids with different _____.
masses colours boiling points viscosities
6. Different hydrocarbons in crude oil have different boiling points, so they can be separated by fractional _____.
separation distillation partitioning osmosis
7. The fractionating column is _____ at the bottom and _____ at the top.
cool / hot hot / cool red / blue
8. Small hydrocarbons with only a few carbon atoms have _____ boiling points.
low high
9. _____ hydrocarbons containing _____ carbon atoms have high boiling points.
Small / few Large / many
10. _____ hydrocarbons travel further up the fractionating column before they condense because they have _____ boiling points.
Smaller / lower Larger / higher
11. Substances with _____ boiling points condense near the bottom of the fractionating column.
low high
12. Bigger hydrocarbon molecules are _____ viscous than small molecules.
less more
13. Bigger hydrocarbon molecules are _____ volatile than small molecules.
less more
14. Bigger hydrocarbon molecules are _____ flammable than small molecules.
less more
15. Which process allows large hydrocarbons to be broken down into smaller hydrocarbons?
polymerisation cracking fractional distillation

Use the "Crude Oil: bounce quiz" at the eChalk website to help you answer these questions.

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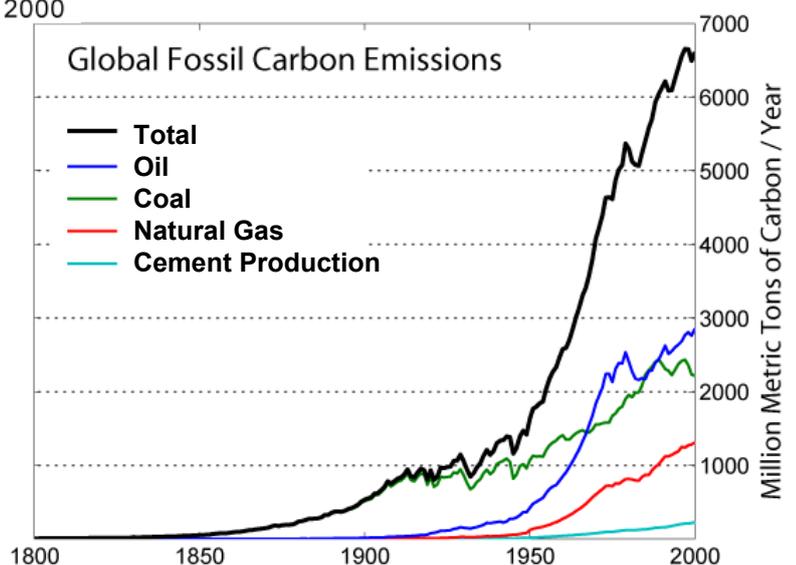
16. Cracking requires a _____ temperature and a _____.
low / battery low / catalyst high / hammer high / catalyst
17. Materials like crude oil and coal, which formed from living things many years ago, are called _____.
fossil fuels renewable fuels dinosaur juice green fuels
18. Which of the following is not a fossil fuel?
natural gas uranium-235 oil coal
19. Fossil fuels take a long time to form and we are using them up more quickly than they form. Fossil fuels are _____ energy resources.
renewable green non-renewable carbon-neutral
20. Present estimates are that our supplies of crude oil will run out in about _____ years time unless we use it more efficiently.
1 50 500 5000



The prevailing scientific opinion on climate change is that "most of the warming observed over the last 50 years is attributable to human activities."

Carbon dioxide gas is a significant contributor to the 'greenhouse effect'.

Have a look at these two charts. Do you think there's a link?



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(Answers) Crude oil and fractional distillation

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