

Ceramics, polymers & composites recall questions

1. What three materials are heated to make soda-lime glass? **Sand, limestone and sodium carbonate**
2. What two materials are heated to make borosilicate glass? **Sand, boron trioxide**
3. What important property difference does borosilicate glass have? **Higher melting point so could be used in a furnace window for example**
4. What are two important uses of clay ceramics? **Bricks and pottery**
5. What are the two steps in making clay ceramics? **Mould and heat to a high temperature**
6. What are the two different ethene polymers called? **Low density and high density poly(ethane)**
7. Thermosetting polymers have a **high** melting point. Thermosoftening polymers can be **moulded** into shape.
8. What are the two different parts of most composites called? **Matrix and reinforcement (Or binder and fragments for alternative words)**
9. Name two different composite materials. **Concrete, fibreglass, reinforced concrete**

Ceramics, polymers & composites application questions

1. What are the different conditions used to produce LD and HD polyethene?
2. Sketch diagrams and write some sentences to explain
 - (a) why thermosoftening polymers will stretch easily
 - (b) why thermosetting polymers are rigid.
3. Which type of plastic is used in shopping bags. Explain your answer.
4. What properties do both concrete and steel give to each part of reinforced concrete ?