Question: 3A. Nuclear power: Are politicians and the environmental movement being too quick to
abandon it?

*Hint: Discuss the benefits and risks/costs of nuclear power.*

**Structure:**

Introduction Points (250-300):

1. What is nuclear power
2. Current technologies used
3. Future technologies in the industry
4. Introduce benefits
5. Introduce risks
6. Introduce costs

Point 1 (300-400) - benefit : Environmental
Point 2 (300-400) - benefit : Reliability and Power generating capacity
Point 3 (300-400) - benefit :

Point 4 (300-400) - risk/cost : Economic cost (tentative)
Point 5 (300-400) - risk/cost : Handling risk (tentative)
Point 6 (300-400) - risk/cost : Safety from malicious activity

Conclusion (250-300)

| Benefits to research | Cons to research |
|---|---|
| Low Pollution<br><br>Low Operating Costs<br><br>Reliability<br><br>More Proficient Than Fossil Fuels<br><br>Large power-generating capacity | Environmental Impact<br><br>Radioactive Waste Disposal<br><br>Nuclear Accidents<br><br>High Cost<br><br>Uranium is Finite<br><br>Hot Target for Militants<br><br>Unknown risks.<br><br>Long construction time. |

Current technologies used:

1. Reaction - Fusion vs Fission
2. PartsCooling tech
   liquid metal-cooled fast reactors
   sodium-cooled fast reactors
   fluoride salt-cooled high-temperature reactors
   a. Fuel.
   b. Moderator
   c. Control rods
   d. Containment
3. Cooling tech
   a. liquid metal-cooled fast reactors
   b. sodium-cooled fast reactors
   c. fluoride salt-cooled high-temperature reactors

Future technologies in the industry: