4.3 HL: Global risks and resilience

Name: _____ Class: _____ Date: _____ **Total: 30 marks**

KEY WORDS global risk • chokepoint • transboundary pollution • sovereignty • resilience • Montreal Protocol

Objective

Build the skills to answer Paper 3 questions on **global risks and resilience**: how connected places share shocks (pandemics, financial crises, **chokepoints** , **transboundary pollution** , loss of sovereignty), and how places build **resilience** at global, national and local scales.

You must be able to:

- explain how global connections spread risks, with named examples
- calculate the size of a global shock from data
- explain how a chokepoint threatens supply chains
- evaluate an international agreement as a response to a global risk
- evaluate resilience strategies at different scales

1 Key knowledge and worked examples

Risks that cross borders

risk	example
pandemic	COVID-19 cut world GDP by about 3 % in 2020 (IMF)
financial crisis	2008: began in the US housing market and spread to banks everywhere
supply-chain chokepoint	the Suez Canal blockage, March 2021: a container ship blocked the canal for six days
transboundary pollution	smoke from forest fires in Indonesia in 2015 covered Singapore and Malaysia
loss of **sovereignty**	global rules or companies limit what a government can decide

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Building resilience

scale	strategy	example
global	international agreements	the **Montreal Protocol** (1987) phased out the gases that damage the ozone layer; it is slowly recovering
national	stockpiles; more than one supplier	car makers buying chips from several countries after 2021
local	early warnings, insurance, savings	text-message warnings before floods

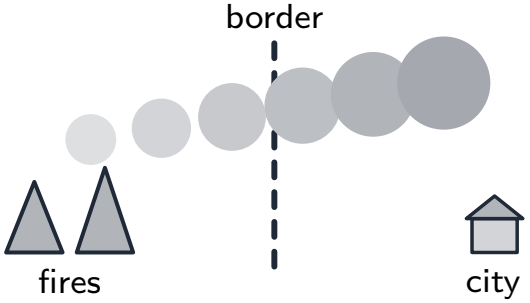
Technology both reduces risk (early-warning satellites; vaccines developed in under a year) and creates new risk (cyber attacks on banks and power grids).

Worked example. A world economy of about US$88 trillion falls by 3 %: loss $\approx 0.03 \times 88 \approx 2.6$ trillion dollars.

Judging resilience: who is protected → at what cost → how fast recovery is → who is left out.

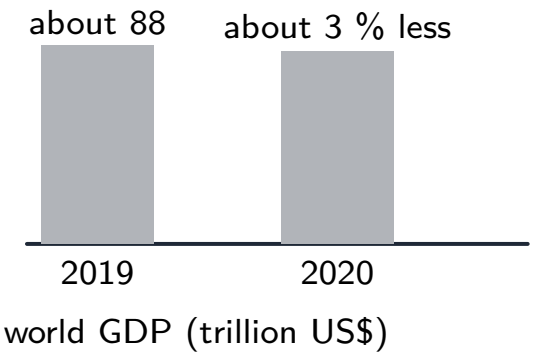
2 Practice

2.1 Define **transboundary pollution**, and give **one** example. [2]

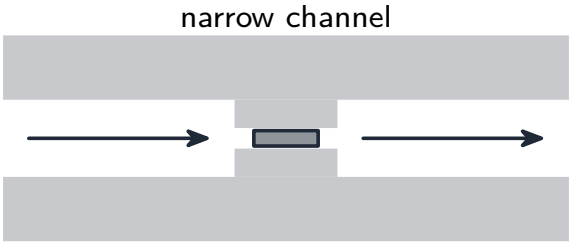


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2.2 In 2020 world GDP fell by about 3 % because of COVID-19. If the world economy was worth about US$88 trillion, calculate the loss, and explain why connected economies shared the shock. [3]

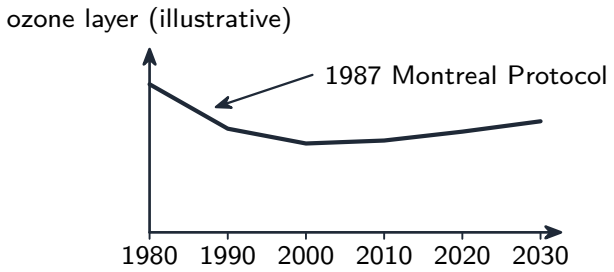


2.3 Define a **chokepoint**, and give **one** example. [2]

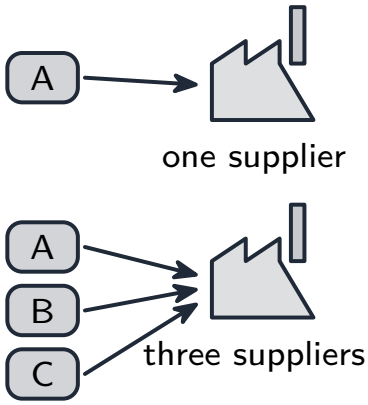


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2.4 Explain why the Montreal Protocol (1987) is seen as a successful response to a global risk. [3]



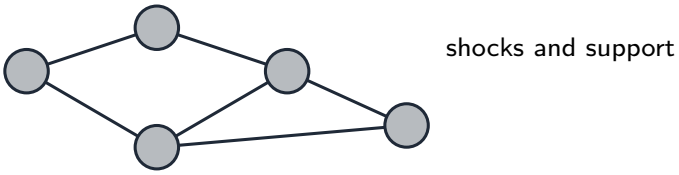
2.5 Explain **two** ways a country can make its supply chains more resilient. [4]



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3 Exam-style questions

3.1 *(Paper 3, part (b).)* "Greater global interconnection increases risk more than it builds resilience." Evaluate this statement. [16]



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Solutions

Marking: **M1** a correct method, **A1** the correct answer, **B1** an independent mark.

Each answer shows the steps, then the **result**.

2.1

pollution that starts in one country and crosses a border to harm another; e.g. smoke from forest fires in Indonesia (2015) covering Singapore and Malaysia / acid rain / river pollution flowing downstream

2.2

$0.03 \times 88 \approx \mathbf{2.6}$ trillion dollars; factories, flights and supply chains link countries, so closures in one place stopped production and trade in others

2.3

a narrow point on a major route through which a large share of trade must pass; e.g. the Suez Canal (blocked for six days in 2021) / the Strait of Malacca / the Strait of Hormuz

2.4

almost every country agreed to phase out the gases (CFCs) that damage the ozone layer; there were substitutes, so the cost of change was low; measurements show the ozone layer is slowly recovering, so the risk of harm from UV radiation is falling

2.5

any two, explained: buy from several suppliers in different countries, so one disaster or blocked route does not stop production; keep stockpiles of key goods, e.g. medicines, chips, grain, to cover a short shock; make more key goods at home or nearby, so long, fragile routes are less important; map the supply chain, so weak points are found before a crisis

3.1

Mark with the markbands: [13-16] a sustained argument, detailed examples at more than one scale, the concepts of the guide (power, places, processes, possibilities) used, a balanced and well-supported judgement; [9-12] a clear argument with examples and some evaluation; [5-8] relevant knowledge, mostly description, a weak judgement; [1-4] little that is relevant. Points that may be included: increases risk: COVID-19 spread along flight routes and cut world GDP by about 3 % in 2020; the 2008 crisis started in the US housing market and spread to banks everywhere; chokepoints: the Suez Canal blockage (2021) delayed trade worldwide for weeks; transboundary pollution: Indonesian fire smoke (2015) harmed health in Singapore and Malaysia; cyber attacks travel through the same networks; builds resilience: the same links let vaccines be developed and shared in under a year; international agreements such as the Montreal Protocol solved a global risk; trade lets a country import food after a bad harvest instead of facing famine; remittances (about US$650 billion a year) support families after disasters; scale and places: rich, well-connected places recover faster; poor places are exposed but have less capacity; judgement: interconnection spreads shocks faster, but also gives the tools to recover; whether risk or resilience wins depends on cooperation and on each place's capacity