# Worksheet: Doughnut Economics

*Answer each part's questions when your teacher pauses the video. For True or False, circle one.*

**Part 1** Watch 0:00 – 3:41 **What does economics actually mean?**

1. **GDP is an acronym – what does it stand for?**

| |
|---|
| G_____ D_____ P_____ |

2. **The word *economics* comes from the Greek *oikonomia*. What did it mean?**

| | | | | | |
|---|---|---|---|---|---|
| A | Counting money | B | Household management | C | Trade and markets |

**Part 2** Watch 3:57 – 7:17 **A planet in balance**

3. **What does it mean when we say a healthy planet is resilient?**

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| |

**Part 3** Watch 7:17 – 10:58 **Planetary boundaries and tipping points**

4. **How many of the nine planetary boundaries are crossed now? And in 2009?**

| |
|---|
| Now: _____ In 2009: _____ |

5. **Which of these best describes a climate tipping point?**

| | |
|---|---|
| A | A small change that is easy to undo if we act quickly |
| B | The moment a country's economy starts to grow again |
| C | A threshold that, once crossed, leads to rapid and often irreversible change |

6. **Fill in the blanks about the Amazon rainforest:**

| |
|---|
| It has lost about ____% of its forest. At ____% it could become a dry _____. |

**Part 4** Watch 10:58 – 13:20 **The ecological ceiling and the social floor**

7. **Odd one out: which is *not* part of the doughnut's 'social floor'?**

| | | | | | |
|---|---|---|---|---|---|
| A | Housing | B | Political voice | C | Access to nature |

**Part 5** Watch 13:20 – 16:59 **The safe and just space for humanity**

8. **Fill in the gaps using: *overshoot* · *shortfall* · *safe and just space***

| | |
|---|---|
| Going above the ecological ceiling is called… | |
| Falling below the social floor is called… | |
| The green ring in between is called the… | |

9. **The richest 20% of countries, home to just 15% of the world's people, cause more than 40% of ecological overshoot.**

| True | False |
|---|---|

**Part 6** Watch 16:59 – 21:18 **Kate Raworth and "economic man"**

10. **Kate Raworth first published the doughnut idea while working for:**

| | | | | | |
|---|---|---|---|---|---|
| A | Oxfam | B | The UN | C | Friends of the Earth |

11. **The time and energy spent by unpaid carers in an economy is included in GDP.**

| True | False |
|---|---|

12. **The amount of money spent by a country cleaning up an oil spill is included in that country's GDP figures.**

| True | False |
|---|---|

13. **Kate Raworth came up with all the ideas in Doughnut Economics herself.**

| True | False |
|---|---|

14. **Behavioural economics has proven that all people, all the time, are rational, unbound by social ties, motivated solely by self-interest, have "perfect information" about the future, and make all choices based on utility maximisation – nothing else.**

| True | False |
|---|---|

**Part 7** Watch 21:18 – 24:41 **Seven ways to think like a 21st-century economist (1–4)**

15. **Way 1 is to *change the goal*. Instead of growing GDP, the new goal is:**

| Meeting the _____ of all within the _____ of the living planet. |
|---|

16. **Both the Irish government and the European Parliament held events exploring a world beyond growth recently.**

| True | False |
|---|---|

17. **Bhutan is the only country in the world to measure Gross National _____?**

| A | Equality | B | Happiness | C | Wealth |
|---|---|---|---|---|---|

18. **Economies are complex systems that are more like a _____ than a car.**

| A | A brain | B | A clock | C | A computer |
|---|---|---|---|---|---|

**Part 8** Watch 24:41 – 28:01 **Seven ways to think like a 21st-century economist (5–7)**

19. **Way 7 is to be *agnostic* about growth. What does that mean?**

| A | Being against all economic growth | B | Thriving, whether or not the economy grows | C | Wanting growth no matter what |
|---|---|---|---|---|---|

20. **Simon Kuznets, the economist behind GDP, said it was a good measure of wellbeing.**

| True | False |
|---|---|

**Part 9** Watch 28:01 – 30:21 **Bringing the doughnut into your school**

21. **Suggest one change that would bring your school more inside the doughnut. Does it help the social floor, the ecological ceiling, or both?**

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|---|

22. **Name the global youth movement "organising, educating and agitating towards an economics that works for everyone."**

| |
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# Teacher Guide

**Video:** Doughnut Economics. Climate and Nature Summit 2026. Post Primary. Irish Schools Sustainability Network, YouTube (30 min 21 s).

The video is split into nine parts of roughly 2–4 minutes. The presenter has built some pauses into the video (marked **Built-in** below); the others are suggested breaks. At each stop, give students a minute or two to answer that part's questions, then run the break. Questions 1, 4, 7, 10–12, 14, 16, 17 and 22 come from the introductory worksheet; a few of them (GDP, Bhutan, Rethinking Economics) go a little beyond what the video says, so students may need a nudge. With all the breaks, allow about 75 minutes. If you need two lessons, end Lesson 1 after the walking debate at 16:59 (about 40 minutes).

**You will need:** sticky notes and a large doughnut drawn on the board or on A3 sheets (Break 4); Agree / Not sure / Disagree signs for the walking debates; optionally 10 counters or sweets per pair (Break 6).

| Stop at | Qs | Break activity | Mins |
|---|---|---|---|
| 3:41 | 1–2 | **Built-in – Too much, too little**<br>The presenter asks students to react to six statements. Pause and read them aloud yourself, one at a time: too much sugar; not enough sleep; too much screen time; too much noise; not enough food; not enough movement. Students act out how each one feels. Link it back: our bodies send signals to get back into balance, and so does the planet. Resume at 3:57. | 3 |
| 7:17 | 3 | **Built-in – Count the boundaries**<br>The presenter asks how many of the nine planetary boundaries have been crossed. Pause on the diagram and let students count. Then ask them to guess how many had been crossed in 2009. Resume: she gives both answers straight away (Q4). | 2 |
| 10:58 | 4–6 | **Suggested – Walking debate**<br>Statement A (see Walking debate below). Close on positive tipping points so students leave this part hopeful, not anxious. | 6 |
| 13:20 | 7 | **Built-in – Doughnut sticky notes**<br>At 11:29 the presenter asks what we need to live a flourishing life, and at 12:55 she suggests this activity. Let the video run to 13:20, then do both together. Students put sticky notes outside the outer ring for things we need less of to protect the living world, and in the middle for things everyone needs more of. Q7 follows on naturally. | 7 |
| 16:59 | 8–9 | **Suggested – Walking debate**<br>Statement B. A good place to end Lesson 1. | 6 |
| 21:18 | 10–14 | **Suggested – The sharing game**<br>Picks up the presenter's question at 20:50: are we always rational? In pairs, Player 1 has €10 (or 10 sweets) and offers Player 2 any split. If Player 2 accepts, both keep their share; if Player 2 refuses, both get nothing. "Rational economic man" would accept any offer above zero, since something beats nothing. Ask who refused an unfair offer, and why. In experiments around the world, most people offer close to half and many refuse very low offers: people care about fairness, not just self-interest (Q14). | 5 |
| 24:41 | 15–18 | **Suggested – Change the goal**<br>Pairs: "If Ireland stopped using GDP as its scorecard, what three things would you measure instead?" Take a few answers, then mention Bhutan's Gross National Happiness (Q17) and that Ireland has had a Well-being Framework since 2021, with 11 dimensions, which it now uses in the Budget process. Do their lists match? | 4 |

| | | | |
|---|---|---|---|
| 28:01 | 19–20 | **Suggested – Pie vote and walking debate**<br>Quick hands-up on the presenter's question at 24:55: is it better to keep growing the pie and hope it trickles down, or to share it fairly from the start? Then Statement C. | 5 |
| 30:21 | 21–22 | **Built-in – Is our school inside the doughnut?**<br>At 28:28 the presenter asks how your school could move more inside the doughnut. Small groups take one area each: energy, waste, food, fairness and gender equality, nature on the school grounds. Each group suggests one action, then everyone answers Q21. | 5 |

# Walking debate

Label one side of the room **Agree**, the other **Disagree** and the middle **Not sure**. Read the statement and let students walk to the spot that matches their view. Ask two or three students from each spot to explain why. Anyone can move if they hear a convincing argument; ask the movers what changed their mind.

**Statement A** (after Part 3, 10:58)

> **"Once we pass a climate tipping point, there's no point trying any more."**
>
> Draw out: it is never "game over". Every fraction of a degree avoided reduces harm and lowers the risk of setting off other tipping points. Tipping points can work for us too: the Global Tipping Points Report 2025 found that solar and wind power have passed a positive tipping point worldwide, as have electric vehicles, batteries and heat pumps in leading markets. Social tipping points happen when enough people change a habit that it becomes the new normal.

**Statement B** (after Part 5, 16:59)

> **"Rich countries like Ireland should do the most to bring the world back inside the doughnut."**
>
> Draw out: the richest fifth of countries have 15% of the world's people but cause 44% of overshoot, while the poorest 40% of countries suffer 63% of the social shortfall and cause only 4% of overshoot. Fairness and responsibility versus "everyone has to play their part".

**Statement C** (after Part 8, 28:01)

> **"Ireland's economy doesn't need to keep growing for life here to get better."**
>
> Draw out: the presenter says growth still matters for lower-income countries building roads and hospitals, but for countries like Ireland she argues outcomes such as health, housing and nature matter more. Irish GDP is a famously poor scorecard: it jumped by about 25% in 2015, mainly because multinational companies moved assets here, not because people were better off.

### More statements from the introductory worksheet

Swap any of these in, or use them if you have time. Each one suits a particular stop:

1. **"Economics is only about maths."** (after Part 1, 3:41 – the presenter says this session "has no equations in it")
2. **"I'm not good at maths so I can't have an opinion about economics."** (after Part 6, 21:18 – she says we are all entitled to an opinion on economics)
3. **"GDP is an invention and like many other inventions, it can be superseded by something that works better for everyone."** (after Part 7, 24:41)
4. **"Growth means progress – progress means growth."** (after Part 8, 28:01)
5. **"Young people are not able to influence the direction of the economy."** (at the end, alongside Q21–22)

# Answers

1. **Gross Domestic Product.** It is the total monetary value of all final goods and services produced within a country's borders during a specific period. Put simply, it is the measure of the "size of an economy."
2. **B.** Household management. *Oikonomia* joins *oikos* (house or household) and *nomos* (rules or management). The presenter's point is that Earth is our common home, so economics should be the art of managing our planetary household. The "Pale Blue Dot" photo she mentions was taken by the Voyager 1 space probe on 14 February 1990, about 6 billion km from home, where Earth shows up as a speck smaller than a pixel.
3. Model answer: being able to take some stress or damage and bounce back to a healthy, stable state. Accept any answer that captures "bouncing back". The presenter uses a rubber band: you can stretch it quite far and it springs back, but stretch it too far and it snaps. For about 12,000 years the Earth has stayed in a stable, "Goldilocks" (just right) state that allowed human civilisation to develop.
4. **Now: seven. In 2009: three.** Planetary boundaries are the thresholds that keep life on Earth within a safe operating zone. If you pass over, or transgress, the boundaries you increase the risk of losing stability, life support and nature's ability to absorb shocks and damage. The framework identifies nine Earth system processes essential for global stability, resilience and life support: climate change plus eight others. The outer ring of the doughnut – the ecological ceiling – represents these boundaries. The Planetary Health Check 2026 confirms that 7 of the 9 are now crossed. At the first assessment in 2009 only three had been transgressed: climate change, biodiversity loss and the nitrogen cycle. Only ozone depletion and aerosol loading are still within safe limits.
5. **C.** The presenter compares it to leaning back on a chair: past the balance point you fall and cannot stop. In climate science, crossing a tipping point sets off changes that speed up, feed on themselves and often cannot be reversed, even if their full effects take decades or centuries to show. The Global Tipping Points Report 2025 found that warm-water coral reefs have already passed their tipping point.
6. **17%, 25%, savannah.** The loss is caused by wildfires, deforestation, illegal logging and changes in land use. The Amazon makes much of its own rain as trees recycle moisture, so losing too much forest dries the region out and causes more forest to die back.
7. **C.** Access to nature is not one of the twelve dimensions of the social foundation: food, water, health, education, income and work, peace and justice, political voice, social equity, gender equality, housing, networks and energy. These broadly reflect the social side of the 17 Sustainable Development Goals, agreed in 2015. (The presenter says "nine" at one point, but the doughnut she shows has twelve.)
8. **Overshoot; shortfall; safe and just space** (for humanity). Doughnut economics aims to bring everyone above the social floor without breaking through the ecological ceiling.

9. **True.** The “Doughnut 3.0” study (Fanning and Raworth, Nature, 2025) tracked the world from 2000 to 2022. The richest fifth of countries, with 15% of the world’s people, caused 44% of overshoot. The poorest 40% of countries, with 43% of the people, experienced 63% of the social shortfall but caused only 4% of the overshoot. Global GDP more than doubled over the period, yet social progress slowed and overshoot accelerated.
10. **A.** Oxfam. Kate Raworth set out the doughnut in a 2012 Oxfam discussion paper, which grew into her 2017 book. The paper can be viewed here: A safe and just space for humanity – Can we live within the doughnut?
11. **False.** Because GDP is a measure of the money spent on goods and services in an economy, unpaid care work does not contribute to GDP. According to the most recent CSO data, the percentage of the total population providing regular unpaid care increased to 6% in 2022. A greater proportion of unpaid care was provided by females compared with males. In 2022, almost half (46%) of carers provided up to 14 hours of unpaid help per week.
12. **True.** Because GDP includes ‘recovery spending’, an oil spill clean-up increases the figure because all money spent on labour, equipment and services counts as economic activity. In this way, GDP treats environmental destruction and disaster recovery as a financial gain while ignoring the loss of natural and community assets. To illustrate, the 2010 Deepwater Horizon oil spill into the Gulf of Mexico, which leaked an estimated 3.19 million barrels of oil, ultimately registered as a net positive or neutral blip on national GDP because of the massive influx of paid clean-up labour required.
13. **False.** Many of the ideas had existed for centuries, including in Indigenous communities. Examples are seventh-generation thinking (the Haudenosaunee principle of weighing how a decision will affect people seven generations from now) and *Buen Vivir* (“good living”, an Andean idea of living well with community and nature, written into Ecuador’s constitution in 2008). Raworth’s contribution was to gather them into one visual, accessible book.
14. **False.** Behavioural economists such as Daniel Kahneman have found impressive evidence that humans regularly make irrational choices that are not in their best interests in terms of utility maximisation. For example, psychological studies show that people are more averse to loss than they are attracted to gain. One study found that students who were given free $6 coffee mugs would not part with them, even though, had they wanted them, they could have just bought them from the campus bookstore! This is called ‘loss aversion’. Another example of irrationality is the ‘sunk cost fallacy’: most people will stay in a cinema watching a movie they aren’t enjoying because leaving feels like a “waste of money”. However, the money is gone whether they stay or leave; if they stay they are also losing time. As an account of how human beings behave in general, the model of *homo economicus* has been repeatedly disconfirmed by behavioural, cognitive and other social sciences.
15. **Needs; means.** “Meeting the needs of all within the means of the living planet.” The seven ways are: change the goal; see the big picture; nurture human nature; get savvy with systems; design to distribute; create to regenerate; be agnostic about growth.

16. **False** – it is actually the UN and the European Parliament! The UN Secretary-General has set up an independent High-Level Expert Group on Beyond GDP, which has heard from groups like Rethinking Economics and the Youth Moving Beyond GDP Initiative (Rethinking Economics blog). In 2023, the European Parliament held a Beyond Growth conference to reshape long-term EU policymaking. The presenter mentions these EU conferences at 22:11.
17. **B.** Gross National Happiness is a term coined by His Majesty the Fourth King of Bhutan, Jigme Singye Wangchuck, in the 1970s. The concept implies that sustainable development should take a holistic approach towards notions of progress and give equal importance to non-economic aspects of wellbeing. The Gross National Happiness Index is a single number index developed from four pillars – good governance, sustainable socio-economic development, cultural preservation and environmental conservation – making 33 indicators categorised under nine domains: psychological wellbeing, health, education, time use, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards. Together they describe the conditions of a "good life" for the Bhutanese people.
18. **A.** This is Way 4, *Get savvy with systems*: treat the economy as a complex, ever-changing system rather than a machine. The presenter says economics has suffered from "physics envy", wanting laws as reliable as gravity, but people are unpredictable and economies keep evolving.
19. **B.** Agnostic means "you could take it or leave it". Raworth argues we need economies that make us thrive whether or not they grow, rather than economies that must grow whether or not they make us thrive. Nothing in nature grows forever.
20. **False.** Kuznets, who developed the national accounts that became GDP, warned the US Congress in 1934 that a nation's welfare can scarcely be judged from its national income. Note: the presenter says "JFK", but the photo on her slide is Robert F. Kennedy, whose 1968 speech said GDP measures everything except what makes life worthwhile. Goodhart's law, also on the slide: when a measure becomes a target, it stops being a good measure.
21. Open answer. Ecological ceiling: cutting energy use, solar panels, reducing food waste, composting, refill stations, letting part of the grounds go wild for pollinators. Social floor: a breakfast club, a uniform swap, free period products, a stronger student council voice, a buddy system. Both: a school garden that grows food for the canteen. Global Donut Days (20–24 October 2026) is a ready-made reason to hold a school event.
22. **Rethinking Economics.** Perhaps you could join! See rethinkeconomics.org.