





Lesson: Getting to know Sustainable development goals – SDGs

Activity: Puzzles and Flashcards- Use Visualization & Association to Memorize Anything

Through different images (puzzles, flashcards) students can learn different concepts such as SDG (Sustainable Development Goals), Sustainable Development, Social Entrepreneurship, Carbon footprint...

Virtual Flashcards (https://www.bookwidgets.com/play/Q9AxNoOS-iQAEyWLE_AAAA/UCM5GUP?teacher_id=4631471238152192)

References: <https://www.un.org/sustainabledevelopment/>

	<p>The Sustainable Development Goals are a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere. The 17 Goals were adopted by all UN Member States in 2015, as part of the 2030 Agenda for Sustainable Development which set out a 15-year plan to achieve the Goals.</p>
 <p>Source: https://www.ecolaningenieria.com/</p>	<p>Sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection.</p>



The Goals and targets will stimulate action in areas of critical importance: people, planet, prosperity, peace and partnership.

PEOPLE - to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment. (Goal 1, 2, 3, 4 and 5)

PROSPERITY - to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature. (Goal 7, 8, 9, 10 and 11)

PLANET - to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations. (Goal 6, 12, 13, 14 and 15)

PEACE - to foster peaceful, just and inclusive societies free from fear and violence. There can be no sustainable development without peace and no peace without sustainable development. (Goal 16)

PARTNERSHIP - to mobilize the means required to implement this agenda through a revitalised global partnership for sustainable development, based on a spirit of strengthened global solidarity, focused in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people. (Goal 17)

SUSTAINABILITY



The concept of sustainability is composed of three pillars: economic, environmental, and social—also known informally as profits, planet, and people.

KEY TAKEAWAYS

- Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs.
- Investors can be wary of companies that commit to sustainability. Although the optics can be beneficial to share price, investors worry about companies being transparent with their earnings results.
- Big brands often make pledges to sustainability, but it often takes a long time to achieve sustainability goals.

(Source:

<https://www.investopedia.com/terms/s/sustainability.asp>)



<p>Carbon Footprint</p> <p>Source: https://www.fieldaircompressors.co.za/</p>	<p>Carbon footprint is the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community.</p>
<p>1 NO POVERTY</p>	<p>More than 700 million people, or 10 percent of the world population, still live in extreme poverty today, struggling to fulfil the most basic needs like health, education, and access to water and sanitation, to name a few. The majority of people living on less than \$1.90 a day live in sub-Saharan Africa.</p>
<p>2 ZERO HUNGER</p>	<p>Current estimates are that nearly 690 million people are hungry, or 8.9 percent of the world population – up by 10 million people in one year and by nearly 60 million in five years. The majority of the world’s undernourished – 381 million – are still found in Asia. More than 250 million live in Africa, where the number of undernourished is growing faster than anywhere in the world.</p>
<p>3 GOOD HEALTH AND WELL-BEING</p>	<p>In 2018 an estimated 6.2 million children and adolescents under the age of 15 years died, mostly from preventable causes. Of these deaths, 5.3 million occurred in the first 5 years, with almost half of these in the first month of life.</p>
<p>4 QUALITY EDUCATION</p>	<p>Education enables upward socioeconomic mobility and is a key to escaping poverty. Over the past decade, major progress was made towards increasing access to education and school enrollment rates at all levels, particularly for girls. Nevertheless, about 260 million children were still out of school in 2018 – nearly one fifth of the global population in that age group. And more than half of all children and adolescents worldwide are not meeting minimum proficiency standards in reading and mathematics.</p>



<p>5 GENDER EQUALITY</p>		<ul style="list-style-type: none"> - Globally, 750 million women and girls were married before the age of 18 and at least 200 million women and girls in 30 countries have undergone FGM. - The rates of girls between 15-19 who are subjected to FGM (female genital mutilation) in the 30 countries where the practice is concentrated have dropped from 1 in 2 girls in 2000 to 1 in 3 girls by 2017. - In 18 countries, husbands can legally prevent their wives from working; in 39 countries, daughters and sons do not have equal inheritance rights; and 49 countries lack laws protecting women from domestic violence.
<p>6 CLEAN WATER AND SANITATION</p>		<ul style="list-style-type: none"> - 1 in 4 health care facilities lacks basic water services - 3 in 10 people lack access to safely managed drinking water services and 6 in 10 people lack access to safely managed sanitation facilities. - At least 892 million people continue to practice open defecation. <p>Women and girls are responsible for water collection in 80 percent of households without access to water on premises.</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>		<ul style="list-style-type: none"> - 13 percent of the global population still lacks access to modern electricity. - 3 billion people rely on wood, coal, charcoal or animal waste for cooking and heating - Energy is the dominant contributor to climate change, accounting for around 60 percent of total global greenhouse gas emissions.
<p>8 DECENT WORK AND ECONOMIC GROWTH</p>		<ul style="list-style-type: none"> - The global unemployment rate in 2017 was 5.6 percent, down from 6.4 percent in 2000. - Globally, 61 percent of all workers were engaged in informal employment in 2016. Excluding the agricultural sector, 51 percent of all workers fell into this employment category. - Men earn 12.5 percent more than women in 40 out of 45 countries with data.
<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>		<ul style="list-style-type: none"> - In 2018, 96 percent of the world's population lived within reach of a mobile-cellular signal, and 90 percent of people could access the Internet through a third generation (3G) or higher-quality network. - 16 percent of the global population does not have access to mobile broadband networks. - The global share of manufacturing value added in GDP increased from 15.2 percent in 2005 to 16.3 percent in 2017, driven by the fast growth of manufacturing in Asia.



<p>10 REDUCED INEQUALITIES</p> 		<ul style="list-style-type: none"> - Evidence from developing countries shows that children in the poorest 20 percent of the populations are still up to three times more likely to die before their fifth birthday than children in the richest quintiles. - Social protection has been significantly extended globally, yet persons with disabilities are up to five times more likely than average to incur catastrophic health expenditures. - Despite overall declines in maternal mortality in most developing countries, women in rural areas are still up to three times more likely to die while giving birth than women living in urban centers.
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> 		<ul style="list-style-type: none"> - Half of humanity – 3.5 billion people – lives in cities today and 5 billion people are projected to live in cities by 2030. - 95 percent of urban expansion in the next decades will take place in developing world - 828 million people live in slums today and most of them are found in Eastern and South-Eastern Asia.
<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 		<p>Worldwide consumption and production — a driving force of the global economy — rests on the use of the natural environment and resources in a way that continues to have destructive impacts on the planet. Economic and social progress over the last century has been accompanied by environmental degradation that is endangering the very systems on which our future development — indeed, our very survival — depends.</p>
<p>13 CLIMATE ACTION</p> 		<p>Thanks to the Intergovernmental Panel on Climate Change we know:</p> <ul style="list-style-type: none"> - From 1880 to 2012, average global temperature increased by 0.85°C. To put this into perspective, for each 1 degree of temperature increase, grain yields decline by about 5 percent. - Oceans have warmed, the amounts of snow and ice have diminished and sea level has risen. From 1901 to 2010, the global average sea level rose by 19 cm as oceans expanded due to warming and ice melted. - Given current concentrations and on-going emissions of greenhouse gases, it is likely that by the end of this century, the increase in global temperature will exceed 1.5°C compared to 1850 to 1900 for all but one scenario.



<p>14 LIFE BELOW WATER</p>	<ul style="list-style-type: none"> - Over three billion people depend on marine and coastal biodiversity for their livelihoods. - Globally, the market value of marine and coastal resources and industries is estimated at \$3 trillion per year or about 5 percent of global GDP. - Marine fisheries directly or indirectly employ over 200 million people. - Coastal waters are deteriorating due to pollution and eutrophication. Without concerted efforts, coastal eutrophication is expected to increase in 20 percent of large marine ecosystems by 2050.
<p>15 LIFE ON LAND</p>	<ul style="list-style-type: none"> - Around 1.6 billion people depend on forests for their livelihood, including 70 million indigenous people. - Forests are home to more than 80 percent of all terrestrial species of animals, plants and insects. - Between 2010 and 2015, the world lost 3.3 million hectares of forest areas. Poor rural women depend on common pool resources and are especially affected by their depletion.
<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<ul style="list-style-type: none"> - Among the institutions most affected by corruption are the judiciary and police. - Corruption, bribery, theft and tax evasion cost some US \$1.26 trillion for developing countries per year; this amount of money could be used to lift those who are living on less than \$1.25 a day above \$1.25 for at least six years - Birth registration has occurred for 73 percent of children under 5, but only 46 percent of Sub-Saharan Africa have had their births registered. - Approximately 28.5 million primary school aged people who are out of school live in conflict-affected areas.
<p>17 PARTNERSHIPS FOR THE GOALS</p>	<ul style="list-style-type: none"> - 79 percent of imports from developing countries enter developed countries duty-free - The debt burden on developing countries remains stable at about 3 percent of export revenue - Trade, foreign direct investment and remittances are all projected to decline by up to 40 percent in 2020. - Almost half of the world's population is not connected to the internet, particularly in poor countries.

Virtual Puzzles:



<h1 style="text-align: center;">SUSTAINABILITY</h1> <p>SOCIETY ENVIRONMENT ECONOMY TRAFFIC POWER CO₂-EMISSIONS RECYCLING</p> <p>https://www.shutterstock.com/image-vector/banner-sustainability-concept-society-environment-economy-1067928860</p>	<p>https://www.bookwidgets.com/play/0XKs9mBa-iQAEK7_I_AAAA/ZCMRHZQ/sustainability?teacher_id=4631471238152192</p>
<p style="text-align: center;">SUSTAINABLE DEVELOPMENT GOALS</p> <p>1 NO POVERTY 2 ZERO HUNGER 3 GOOD HEALTH AND WELL-BEING 4 QUALITY EDUCATION 5 GENDER EQUALITY 6 CLEAN WATER AND SANITATION</p> <p>7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 10 REDUCED INEQUALITIES 11 SUSTAINABLE CITIES AND COMMUNITIES 12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> <p>13 CLIMATE ACTION 14 LIFE BELOW WATER 15 LIFE ON LAND 16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS</p>	<p>https://www.bookwidgets.com/play/dGIn_3oH-iQAE2JBE_AAAA/BCMSJB2/sdg-2030?teacher_id=4631471238152192</p>
<h3 style="text-align: center;">Carbon Footprint</h3> <p>emissions electricity transport offsets</p> <p>CO₂ H₂O</p> <p>fuel gas recycling waste</p> <p>Source: https://www.fielddaircompressors.co.za/</p>	<p>https://www.bookwidgets.com/play/Oe0IOZuJ-iQAEjXnfAAAA/ZCMRLZM/carbon-footprin?teacher_id=4631471238152192</p>
<p>SOCIAL fair ECONOMIC</p> <p>SUSTAINABLE DEVELOPMENT</p> <p>livable viable</p> <p>ENVIRONMENTAL</p> <p>Source: https://www.ecolaningenieria.com/</p>	<p>https://www.bookwidgets.com/play/FtVZq_G-iQAEbleNfAAAA/XCMJXPV/sustainable-deve?teacher_id=4631471238152192</p>



<p>PEOPLE End poverty and hunger in all forms and ensure dignity and equality</p> <p>PLANET Protect our planet's natural resources and climate for future generations</p> <p>PROSPERITY Ensure prosperous and fulfilling lives in harmony with nature</p> <p>PARTNERSHIP Implement the agenda through a solid global partnership</p> <p>PEACE Foster peaceful, just and inclusive societies</p> <p>Sustainable Development</p> <p><small>Source: www.kindpng.com/</small></p>	<p>https://www.bookwidgets.com/play/IHIU8GBI-iQAEPx5I_AAAA/ACMLMA7/sustainable-dev?teacher_id=4631471238152192</p>
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