## Sustainable development facts questionnaire (SDFQ)

Based on the factual information available in the game the Sustainable development facts questionnaire (SDFQ) was created as a pre- post-test of the children knowledge of sustainability before and after using the application. The SDFQ (see below) was pilot tested with 48 children between grades 4 and 5.

	Economical and social factors
	Economical, social, and environmental factors
	Environmental and social factors
	Economical, environmental and technological factors
2 404	is a city's sustainability affected by energy generation? Circle Rig
	for each of the propositions below:
	<b>Right/Wrong</b> - Power plants have environmental costs because they
	affect the environment
	Right/Wrong - Different energy sources all have the same influence of
	city's economy
	<b>Right/Wrong</b> - Power plants cost too much and are therefore not part a sustainable city
3. A sr	nall coal power plant: Place a cross in front of the correct answer
	swer is correct)
	Uses water power to create a stabile energy stream
	Uses the sun and creates a lot of energy
	Produces electricity by burning coal. It is small, cheap,
	Produces electricity by burning coal. It is small, cheap, and influences the environment negatively
4. Circ	and influences the environment negatively  Does not affect the air quality but has to store uranium  le Right or Wrong for each of the propositions below:
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Solar roofs Better isolation Metro station Better uranium storage  8. Improving the economy by building e.g. commercial constructions influences: Place a cross in front of the best answer (only one answer is correct)  The economy improves but it is bad for the environment, and for the use of renewable and non-renewable forms of energy. The economy improves but the use of non-renewable energy increases. The economy improves but it is bad for the environment. The economy improves but it is bad for people's wellbeing, the environment, and the use of non-renewable forms of energy.  9. Public services, such as hospitals, police, and fire departments can impropeople's wellbeing if: Place a cross in front of all correct answers (there can more than one)  They are built close to residential areas so that many people has access to them. They are constructed near forests to balance the distribution of constructions in a city. These services have costs in terms of energy and oil, so they should		
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The pre-test and post-test versions of the questionnaire contain the following questions from those listed above:

Pre-test	Post-test
1	3
2a,b,c	4b, 4c
4a,d	5a,b,c,d,e
6	8
7a,b,c,d,e	10a,b,c