

## Science Topics Intended at Each Grade by a Majority of Top Achieving Countries.

Topic	Grade 1 <sup>4</sup>	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8 <sup>1</sup>
Organs, tissues			j	j	j	j	j	j
Physical properties of matter			j	j	j	j	j	j
Plants, fungi			j	j	j	j	j	f
Animal types			j	j	j	j	f	j
Classification of matter			f	f	f	f	j	j
Rocks, soil			f	f	f	f	j	j
Light			f				j	j
Electricity				f		f	j	j
Life cycles				j	j	j	j	j
Physical changes of matter				j	j	j	j	j
Heat & temperature				j	j	j	j	j
Bodies of water				f	f	f	j	j
Interdependence of life					f	j	f	f
Habitats & niches					f	f	f	f
Biomes & ecosystems					f	j	f	f
Reproduction					f			f
Time, space, motion					j	j	j	j
Types of forces					f	f	j	j
Weather & climate					f	f	j	j
Planets in the solar system					f	f	f	f
Magnetism						j	j	j
Earth's Composition						f	j	j
Organism energy handling						f	f	j
Land, water, sea resource conservation						f	f	j
Earth in the solar system						f	f	f
Atoms, ions, molecules							j	j
Chemical properties of matter							j	j
Chemical changes of matter							j	j
Physical cycles							f	j
Land forms							f	j
Material & energy resource conservation							f	j
Explanations of physical changes							f	f
Pollution							f	j
Atmosphere							f	f
Sound & vibration							f	f
Cells							f	f
Human nutrition							f	f
Building & breaking								j
Energy types, sources, conversions								j
Dynamics of motion								f
Organism sensing & responding								f
Evolution, speciation, diversity								d
Number of additional topics intended, on average, by top achieving countries to complete their curriculum at each grade level.			5	5	3	2	-4	-4

Intended by half of the top achieving countries **d**

Intended by *all but one* of the top achieving countries (3 out of 4) **f**

Intended by *all* of the top achieving countries. **j**