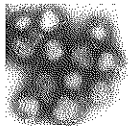
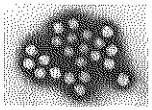
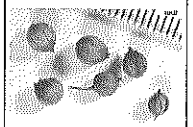
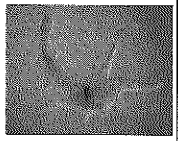
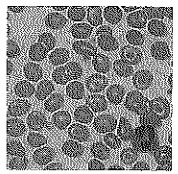
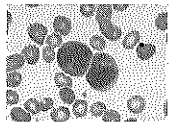
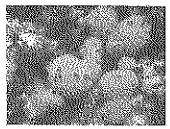
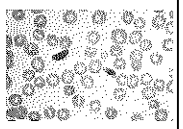
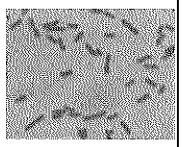
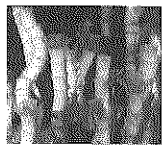
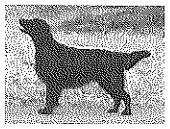
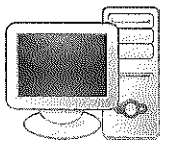
Table 10.1. Information About Viruses and Other Objects Found on Earth

Object and Size[1]	Appearance	Functional "Life" Span	Energy Source	Carbon Source	Waste Production	Responds to External Stimuli	Biomolecules[2] Present in the Object	Form of Reproduction	Genetic Material[3]	Growth?
Influenza Virus 130 nanometers in diameter		10 Years	None	None	None	No	Nucleic Acid Protein	Replication; Requires a host	RNA	No
Adenovirus 220 nanometers in diameter		10 Years	None	None	None	No	Nucleic Acid Protein Lipids	Replication; Requires a host	DNA	No
Coriander Seeds 3 millimeters in diameter		1–10 Years	Organic Compounds[4]	Carbon Dioxide	None	Yes	Nucleic Acid Protein Lipids Carbohydrates	Sexual[5]	DNA and RNA	Yes
Amoeba 500 micrometers in diameter		1–3 Months	Organic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Asexual[6]	DNA and RNA	Yes
Human Red Blood Cell 8 micrometers in diameter		3–4 Months	Organic Compounds	Carbohydrates	No	No	Nucleic Acid Protein Lipids Carbohydrates	None	None	No

1. 1 meter = 100 centimeters = 1000 millimeters = 1,000,000 micrometers = 1,000,000,000 nanometers
2. A biomolecule is any molecule that performs an important function in living organisms. Biomolecules are usually composed of hydrogen, carbon, oxygen, nitrogen, prosperous, or sulfur atoms and they are organized into one of four main groups (carbohydrates, proteins, lipids, and nucleic acids).
3. The genetic material of an object is the molecule(s) that play the fundamental role in determining the nature and structure of an organism or cell.
4. Organic compounds are molecules that are composed of carbon such as sugar (which is a type of carbohydrate)
5. *Sexual* refers to a form of reproduction in which two parents give rise to an offspring.
6. *Asexual* refers to a form of reproduction that involves only one parent that produces genetically identical offspring by budding or by the division of a single cell or the entire organism into two parts.

(continued)

Table 10.1. Information About Viruses and Other Objects Found on Earth (continued)

Object and Size	Appearance	Functional "Life" Span	Energy Source	Carbon Source	Waste Production	Responds to External Stimuli	Biomolecules Present in the Object	Form of Reproduction	Genetic Material	Growth?
Human White Blood Cell 10 micrometers in diameter		1 Month	Organic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	None	DNA and RNA	No
Sponge 100 centimeters in diameter		100–200 Years	Organic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Sexual and asexual	DNA and RNA	Yes
Elodea 40 centimeters in length		2–4 Weeks	Sunlight	Carbon Dioxide	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Sexual and asexual	DNA and RNA	Yes
Plasmodium Falciparum 15 micrometers in length		1–2 Months	Organic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Sexual and asexual but only occurs inside a host	DNA and RNA	Yes
E. Coli 3 micrometers in length		1–3 Months	Organic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Asexual	DNA and RNA	Yes
Tube Worms 1.5 meters in length		100–200 Years	Inorganic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Sexual	DNA and RNA	Yes
Dog 0.75 meters in height		15–20 Years	Organic Compounds	Carbohydrates	Yes	Yes	Nucleic Acid Protein Lipids Carbohydrates	Sexual	DNA and RNA	Yes
Computer 45 centimeters in height		10–20 years	Electricity	None	Yes	Yes	None	None	None	No