

Module 10: Exploring Creation With Physical Science

Friction - A force resulting from the contact of two surfaces. This force opposes motion. (244)

Kinetic friction - The friction that exists between surfaces when at least one of those surfaces is moving relative to the other (249)

Static friction - The friction that exists between surfaces when neither surface is moving relative to the other (249)

Schedule

- Take two days to do 233-238.
- Do experiment 10.1
- Read 238-241. Do experiment 10.2. Stop at Friction
- Read pp 241-244. Do experiment 10.3
- Read 244-250. Take 2 days to read and study the examples.
- continuing....page 250
- Do the oyo questions.
- Read 250-253. Do experiment 10.4.
- Study, take one or two days
- Test

Newton's Second law:

Force = (mass)(acceleration)

The Newton:  $\frac{(kg)(m)}{sec^2}$

Module 11: Apologia's Exploring Creation With Physical Science

Schedule

- Read 261-264
- Read 264-269
- do experiment 11.1
- Read 269-274
- Read 274-277
- Read 277-279
- do experiment 11.2
- Read 280-281
- do experiment 11.3
- Read 281-284
- Study, take one or two days
- Test

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Module 12: Exploring Creation With Physical Science

Charging by conduction - Charging an object by allowing it to come into contact with an object which already has an electrical charge (298)

Charging by induction - Charging an object by forcing some of the charges to leave the object (299)

Conventional current Current that flows from the positive side of the battery to the negative side.

This is the way current is drawn in circuit diagrams, even when it is wrong. (303)

Electric current - The amount of charge that travels through an electrical circuit each second (300)

Open circuit - A circuit that does not have a complete connection between the two sides of the battery. As a result, current does not flow. (306)

Photons - Small "packages" of light that act just like small particles (293)

Resistance - A measure of how much a metal impedes the flow of electrons (305)

Schedule

- Read 289-293
- do experiment 12.1
- Read 293-294
- Read 295-299
- do exp. 12.2
- Read 300-303
- Read 303-305
- do experiment 12.3
- Read 306-308
- Read 308-312
- Study, take one or two days
- Test

Always do the On Your Own questions and check your work afterwards.

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Bookmarks and schedules: donnayoung.org

Module 13: Exploring Creation With Physical Science

Atomic number - The number of protons in an atom (320)

Element - A collection of atoms that all have the same number of protons (322)

Isotopes - Two or more atoms that have the same number of protons but different numbers of neutrons (322)

Mass number - The sum of the number of neutrons and protons in the nucleus of an atom (321)

Nucleus - The center of an atom, containing the protons and neutrons (318)

Radioactive isotope - An atom whose nucleus is not stable (330)

Schedule

- Read 317-323, In your lab book, draw and label figure 13.1
- Read 323-328, In your lab book, draw and label figure 13.3 and do example 13.2 on page 327
- Read 328-332, Study Example 13.3
- Read 333-337, Study Example 13.4
- Read 337-340
- Study, take one or two days
- Test

Table 13.1 from page 327

Bohr Orbit	Electron Capacity
1	2
2	8
3	18
4	32
5	50

Always do the On Your Own questions and check your work afterwards.

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