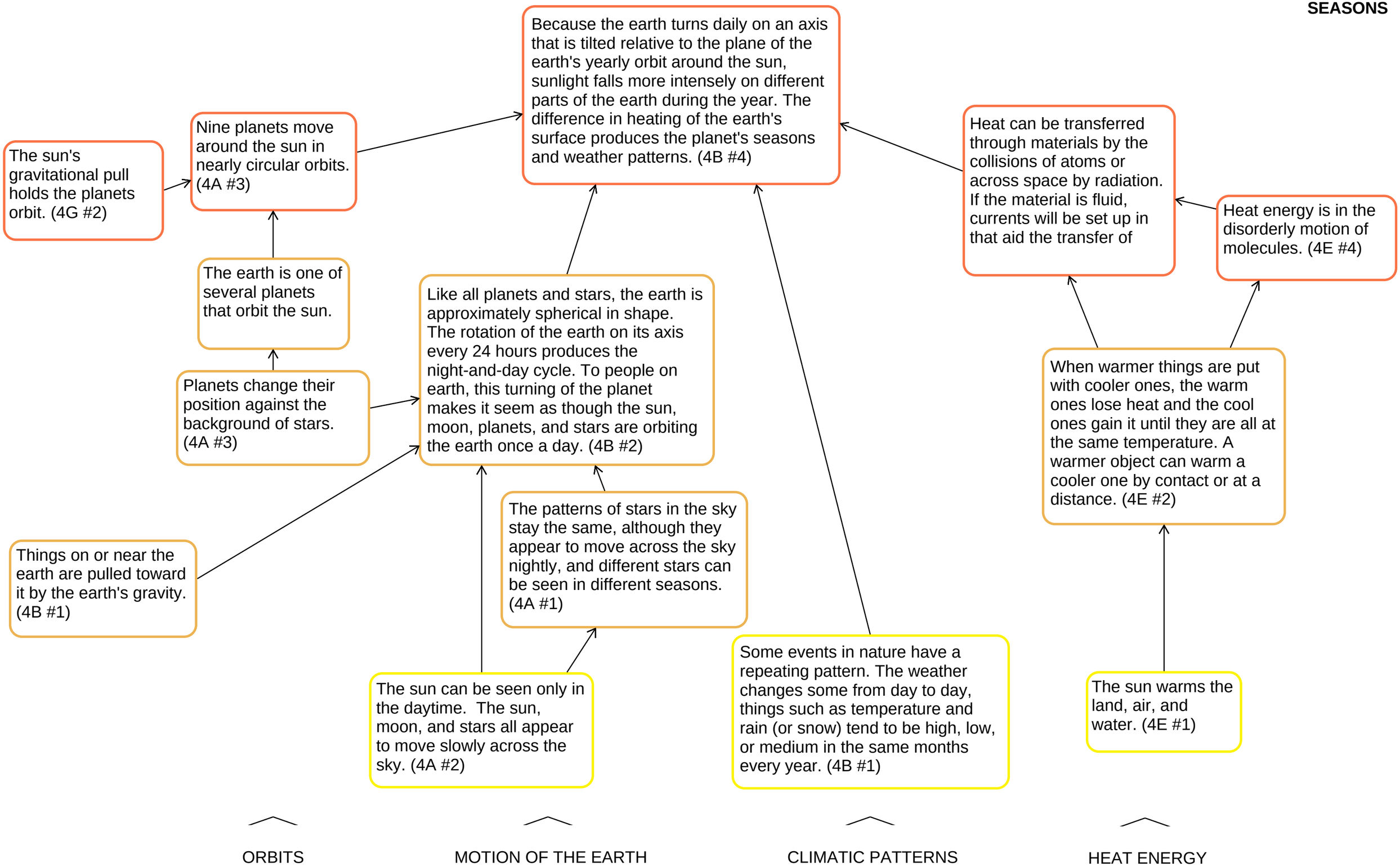
SEASONS


Because the earth turns daily on an axis that is tilted relative to the plane of the earth's yearly orbit around the sun, sunlight falls more intensely on different parts of the earth during the year. The difference in heating of the earth's surface produces the planet's seasons and weather patterns. (4B #4)
Nine planets move around the sun in nearly circular orbits. (4A #3)
The sun's gravitational pull holds the planets orbit. (4G #2)
The earth is one of several planets that orbit the sun.
Planets change their position against the background of stars. (4A #3)
Things on or near the earth are pulled toward it by the earth's gravity. (4B #1)
Like all planets and stars, the earth is approximately spherical in shape. The rotation of the earth on its axis every 24 hours produces the night-and-day cycle. To people on earth, this turning of the planet makes it seem as though the sun, moon, planets, and stars are orbiting the earth once a day. (4B #2)
The patterns of stars in the sky stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons. (4A #1)
The sun can be seen only in the daytime. The sun, moon, and stars all appear to move slowly across the sky. (4A #2)
Heat can be transferred through materials by the collisions of atoms or across space by radiation. If the material is fluid, currents will be set up in that aid the transfer of
Heat energy is in the disorderly motion of molecules. (4E #4)
When warmer things are put with cooler ones, the warm ones lose heat and the cool ones gain it until they are all at the same temperature. A warmer object can warm a cooler one by contact or at a distance. (4E #2)
Some events in nature have a repeating pattern. The weather changes some from day to day, things such as temperature and rain (or snow) tend to be high, low, or medium in the same months every year. (4B #1)
The sun warms the land, air, and water. (4E #1)
ORBITS
MOTION OF THE EARTH
CLIMATIC PATTERNS
HEAT ENERGY