Name_____
Teacher_____
Period_____

EARTH HISTORY EVENTS

YEARS AGO	EVENT	DAYS BEFORE END OF YEAR	CALENDAR DATE (AND TIME Dec 31)
4.6 billion	1. Dust and gasses that will form earth come together.	_____	_____
4.5 billion	2. 5-hour days, moon appears 20 times larger than presently.	_____	_____
4.3 billion	3. Melting from heat of compression and radioactive decay allows differentiation of earth	_____	_____
4.2 billion	4. Gasses are released from volcanoes. Oldest moon rocks.	_____	_____
4.1 billion	5. Atmosphere accumulates.	_____	_____
4 billion	6. Surface temperature above 160^0F.	_____	_____
3.8 billion	7. Oldest rocks form original crust.	_____	_____
3.6 billion	8. Rain falls, rivers and oceans form, erosion and sediment deposition begin.	_____	_____
3.5 billion	9. Simple life originates.	_____	_____
2.8 billion	10. Crust thick enough to hold lava and sediments without sinking - continents begin.	_____	_____
2.5 billion	11. Photosynthesis and release of molecular oxygen begin, oxidation (rust) of minerals occurs.	_____	_____
2 billion	12. Approximate age of oldest rocks exposed in Grand Canyon.	_____	_____
1.8 billion	13. Oxygen-rich atmosphere finished, most exposed iron-rich. minerals oxidized.	_____	_____
1.4 billion	14. Earth's surface cooled to 126^0F, proteins can exist without cooking.	_____	_____
1.2 billion	15. First known simple animals.	_____	_____

YEARS AGO	EVENT	DAYS BEFORE END OF YEAR	CALENDAR DATE (AND TIME Dec 31)
1 billion	16. Sex evolves.	_____	_____
800 million	17. 20-hour days, moon appears twice present size.	_____	_____
680 million	18. First jellyfish.	_____	_____
560 million	19. Rapid increase in number of kinds and complexity of animals. Start of Cambrian Period.	_____	_____
500 million	20. First vertebrates (animals with backbone.)	_____	_____
400 million	21. Plants and animals come ashore	_____	_____
320 million	22. First reptiles.	_____	_____
225 million	23. Permian Extinction - about 90% of sea-going invertebrate species wiped out. Age of dinosaurs begins.	_____	_____
200 million	24. Hello birds and mammals.	_____	_____
180 million	25. Pangaea begins to break up.	_____	_____
65 million	26. Cretaceous Extinction - dinosaurs sign off, mammals take over.	_____	_____
40 million	27. First elephants.	_____	_____
34 million	28. Apes evolve from monkeys.	_____	_____
10 million	29. Kaibab Plateau of northern Arizona uplifted.	_____	_____
5 million	30. First man-like animals, tool making begins.	_____	_____
2 million	31. Ice Age begins - will expand and contract until present.	_____	_____
50 thousand	32. Formation of Meteor Crater.	_____	_____
20 thousand	33. Arrival of man in North America.	_____	_____
10 thousand	34. Last Ice Age ends, agriculture starts .	_____	_____
5 thousand	35. Writing invented.	_____	_____
2,500	36. Science in Greece.	_____	_____
1,000	37. Anasazi live in cliff dwellings of Grand Canyon.	_____	_____
500	38. Europeans arrive in North America.	_____	_____
Today	40. Human poplulation 1,000 times larger than when agriculture began	_____	_____