

Plant and Animal Behaviour Keywords

- | | |
|---------------------------|--|
| 1. actogram | A A rhythm of about 24 hours. |
| 2. auxin | B An internal rhythm that occurs when there are no external cues. It is caused by a biological clock. |
| 3. biological clock | C Muscles and glands that respond to a stimulus. |
| 4. biological orientation | D Active during the day. |
| 5. chemo | E When animals are ranked. A linear hierarchy is where every animal is above or below another; there are no equals. |
| 6. circadian | F Forcing the free running period to follow an external pattern. |
| 7. circannual | G A timing mechanism in living things that is genetically determined. |
| 8. crepuscular | H Prefix meaning gravitational. |
| 9. critical Day Length | I The activity /time graph of an organism. |
| 10. diurnal | J The ability to find and return to the home site (in animals only). |
| 11. dormancy | K Rapid plant growth at the expense of strengthening tissue, caused by gibberellin (plant hormone). |
| 12. effectors | L Period of inactivity to survive adverse (usually cold) conditions by lowering the metabolic rate. |
| 13. endogenous | M A rhythm that continues only when external cues are present. |
| 14. entrainment | N The natural period of the rhythm if there are no external cues. |
| 15. etiolation | O Active at dawn and dusk. |
| 16. exogenous | P Photoperiod above which long-day plants flower and below which short-day plants flower. |
| 17. free running Period | Q Prefix related to chemical. |
| 18. geo | R Directional behaviours (taxes, homing, migration, tropisms etc) |
| 19. geomagnetic cues | S Often used for directional cues (esp.birds), a sense of the Earth's magnet field (very useful on cloudy days when the solar compass cannot be used). |
| 20. hibernation | T A rhythm of about 1 year. |
| 21. hierarchy | U When seeds will not germinate unless certain conditions (such as cutting of the coat or a long period of cold) happen. |
| 22. homing | V A plant hormone that lengthens cells. |

1. hormones
2. innate
3. kineses
4. learned
5. Long Day Plant
6. migration
7. mimicry
8. nastic
9. nocturnal
10. optic lobes
11. phase Shift
12. photo
13. phytochrome
14. pigment
15. receptors
16. short Day Plant
17. star Compass
18. stimulus
19. sun compass
20. taxes
21. thigmo-
22. tropisms
23. zeitgeber

- | | |
|---|--|
| a | Orientation movement of an animals in which the stimulus governs the rate, but not the direction of the movement. |
| b | Adaptive resemblance between unrelated species. |
| c | Visual centres of the brain. |
| d | A plant that flowers when day length exceeds a certain minimum value. |
| e | Prefix meaning light. |
| f | A cell or organ able to detect changes in the environment e.g. eye is a receptor of light. |
| g | Orientation guide for animals finding their way using the star patterns. |
| h | Any material resulting in <u>colour</u> of plant or animal cells, which is the result of selective <u>colour absorption</u> . |
| i | Directional/orientation aid using the direction of the sun. |
| j | A water-soluble chemical messenger – concentration sensitive – it is an effector and in plants can influence growth, timing, cell division. |
| k | Response of a plant organ to a non-directional environmental stimulus, e.g. light intensity. |
| l | External environmental cue by which an internal clock is reset. |
| m | Regular (usually annual) mass movement of members of a species from a place where they breed to another place where they usually feed and then back again. |
| n | Plant movements which occur by growth, and in which the direction of the response depends on the direction of the stimulus. |
| o | A phase of a rhythm, such as its peaks, is shifted so that entrainment occurs. |
| p | Orientation movements of animals in which in which the direction of movement depends on the direction of the stimulus. |
| q | Behaviour modified by experience. |
| r | Prefix for touch. |
| s | Plant that flowers when day length is less than a certain minimum value. |
| t | Change in an organism's surroundings to which it can respond. |
| u | A protein pigment found in plants, acting as the light receptor for photoperiodism in plants and some seed germination. |
| v | Inherited behaviour (not-learned). |
| w | Active mainly at night. |

Answers

1	I
2	V
3	G
4	R
5	Q
6	A
7	T
8	O
9	P
10	D
11	U
12	C
13	B
14	F
15	K
16	M
17	N
18	H
19	S
20	L
21	E
22	J

1	j
2	v
3	a
4	q
5	d
6	m
7	b
8	k
9	w
10	c
11	o
12	e
13	u
14	h
15	f
16	s
17	g
18	t
19	i
20	p
21	r
22	n
23	l