

Unit 2- frequency

Frequency is the expression of repetition. It refers to events that occur more often than once and less often than always. Frequency is, of course, related to measurement and consequently you will meet certain expressions already seen in Unit 1 for a second time.

Self evaluation – entry test

- *Fill in the blanks using appropriate expressions. The first two letters of the answer are printed.*

Example:

*The batteries must be recharged **tw** a month. (two times)*

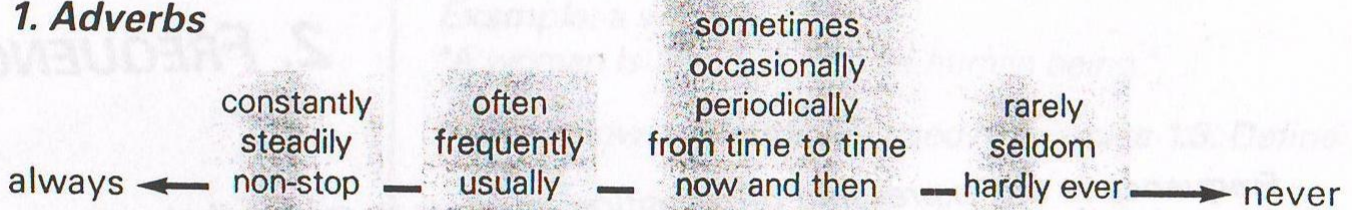
*→ The batteries must be recharged **twice** a month.*

1. Under stress, the heart **be** faster. (*pulsates*)
2. Over the past 100,000 years, the polar ice sheets have advanced or retreated depending on periodic **sw** in the climate. (*variations, oscillations*)
3. The famous 19th century millionaire, Carnegie, emigrated to the US from Scotland and began work in a factory for \$1.20 **pe** week. (*each*)
4. There will be a **re** of epidemics as soon as natural immunisation dies out. (*they will happen again, repeated incidence*)
5. The Ebola virus produces a mortality **ra** which can be as high as 88% in human beings. (*a measure of frequency*)
6. Over the past 300 years, the average height of Europeans has increased **st** (*regularly*)
7. The world population is growing fast. A new child is born **ev** 60 seconds. (*each minute*)
8. The **se** of earthquakes that struck Missouri in 1811 were among the most powerful ever experienced in the United States. (*succession, repeated incidents*)
9. It is estimated that the **ho** flow of water of the Amazon river is between 12,000 and 44,000 million litres. (*every 60 minutes*)
10. The strength of a steel alloy depends on the **ra** of iron to carbon. (*mathematical relationship of proportion*)

Functions & Grammar

KEY POINTS – FREQUENCY

1. Adverbs



- > Politicians **seldom** admit their mistakes.
- > **From time to time**, there are violent cyclones in the Gulf of Mexico.

2. Adjectives

- regular • steady • even • constant • non-stop
- irregular • random • unpredictable
- periodic • intermittent • recurrent • repeated • cyclic
- oscillating • alternating • fluctuating

- > There were **recurrent** interruptions throughout the whole meeting.
- > There is a relatively **even** distribution of the population in Holland.

3. Nouns

- an oscillation • wave • wave-length • pulse • beat
- a group • set • cluster • range • array • pattern

- > A **series** of remarkable events occurred.
- > The Galápagos consist of a **cluster** of islands in the Pacific.

4. Verbs

- to recur • repeat • reduplicate • echo
- to oscillate • fluctuate • vibrate • alternate • beat • swing

- > In politics, public opinion periodically **swings** from left to right.
- > If the symptoms **recur**, you should consult a doctor at once.

5. Word formation

NOUN (TIME UNIT) + **-ly**

hourly • daily
weekly • yearly

re- + VERB

to **renew** • **rebuild**
replace • **rearrange**
reorganise • **reproduce**

- > A **weekly** newspaper.

- > They **rearranged** the furniture in the office.

6. Fixed expressions are also used to indicate:

■ Recurrence

every $\left(\begin{array}{l} \text{month} \\ \text{two weeks / three weeks} \\ \text{other / second / third day} \end{array} \right)$ once twice three times $\left(\begin{array}{l} \text{a / per} \end{array} \right)$ minute
day
week

- They are producing cars at a rate of 100 **a / per day**.
- He goes to the hospital for a check-up **every other month**.

■ Ratio

- **Two out of three** road accidents are caused by alcohol.
- In Denmark, **three in ten** people speak two foreign languages.
- The normal ratio of girls to boys is **100:106**. (a hundred **to a** hundred and six)