1. How do we distinguish between fact and opinion?

A statement that can be backed up with evidence and verified in some way -

Someone’s judgment or belief –

1. Read through the beginnings of some sentences and decide whether they express facts or opinion.
2. This review has demonstrated…
3. According to the results of the latest…
4. In Professor Donald’s view…
5. The company claims that…
6. The research team argues that…
7. The latest findings confirm…
8. Most experts in this field suspect that…
9. Researchers have recently discovered

Underline the key words that made you arrive at your decision.

1. Read the text below and find synonyms (might be phrases) to the words or definitions from 1 to 14 (first two paragraphs: 1-6, para 3: 7-11, para 4/table: 12-15) .

WORDS OFTEN USED WITH FACTS, EVIDENCE and DATA

Researchers try to establish the facts. They hope that the facts will bear out or support their hypothesis. Most carefully check their facts before presenting them to others although there are, of course, dishonest people prepare to distort the facts in order to claim that their facts are interesting, relevant, undeniable or little-known.

Notice how “fact” is also often used in sentences like the following:

It is hard to account for the fact that the star population is confined to a nearly circular region.

The problem stems from the fact that there is a basic conflict of interests.

The lecturer drew attention to the fact that the results had been plagiarized.

***1.confirm, 2.change, 3.connected to the topic being discussed, 4.explain why, 5.has arisen because, 6.emphasised that***

Researchers may look for, collect, examine and consider evidence. The evidence they collect may point to or suggest a conclusion. If the evidence is growing or widespread, it may serve to support a theory. In writing up their research they aim to provide or offer sufficient evidence to support their theories. They are happy if the evidence they find is convincing or powerful and are less happy if the evidence is flimsy or conflicting. They are pleased if new evidence comes to light and if they find abundant evidence. They may talk about finding hard evidence.

***7.not strong, 8.contradictory, 9.becomes known, 10.plenty of, 11.evidence which is reliable and can be proven (used mainly in spoken English)***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| The data is | reliable.comprehensive.accurate.empirical. | You | obtainorganizeanalyseinterpretrecord | Data. | Data | suggestsreflectsindicatesshowsdemonstrates | sth. |

***12.can be trusted, 13.full, complete, 14.based on observation rather than theory, 15.get***

1. Find the odd one out
2. Thorsen’s aim was to *establish/check/bear out/present* the facts.
3. The evidence *suggests/points to/supports/emerges* a different conclusion.
4. Lopez *collected/reflected/obtained/recorded* some fascinating data.
5. The writer provides some *growing/telling/striking/illuminating* examples.
6. The evidence Mistry presents is *convincing/flimsy/vivid/conflicting*.
7. Complete the sentences with these words: *stance, viewpoint, notion*
8. She doesn’t agree with the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that boys and girls should be taught separately.
9. The government has made their \_\_\_\_\_\_\_\_\_\_\_\_\_\_ on the boycott issue clear.
10. The article provides a different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on this difficult topic.
11. We must never accept the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that intelligence is connected to race.
12. The article expresses his \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on ITER and its feasibility.
13. “Russia will maintain current \_\_\_\_\_\_\_\_\_\_\_\_\_\_ over Donbas,” Garry Kasparov has said.
14. Underline the phrases expressing opinion.
15. Mark /circle the phrases connected with presenting and analysing experimental evidence.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/#__sec2title>

[Front Psychol](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/). 2014; 5: 1092.

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# Convergent models of handedness and brain lateralization

[Robert L. Sainburg](https://www.ncbi.nlm.nih.gov/pubmed/?term=Sainburg%20RL%5BAuthor%5D&cauthor=true&cauthor_uid=25339923)\*

## A generalized model of vertebrate brain lateralization

The division of labor between the two sides of the brain is a basic organizational feature of the vertebrate nervous system that arose in evolution even before the appearance of vertebrates (MacNeilage et al., [2009](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/#B52)). According to the work of Rogers and colleagues, a single organizing principle might account for the large array of emotional, language, perceptual, and cognitive asymmetries that have been described across a range of vertebrate animals, including humans. They proposed that the left hemisphere has become specialized for control of well-established patterns of behavior, performed under familiar environmental circumstances, while the right hemisphere has become specialized for detecting and responding to unexpected stimuli in the environment. This elegant hypothesis was derived through seeking fundamental principles from a wide variety of experimental and natural observations of behavior. (...) Recent research examining motor control differences between the dominant and non-dominant arms suggests that Roger's hypothesis might also explain handedness. That is, the left hemisphere (in right handers) might be specialized for controlling movements through predictive mechanisms that are most effective under consistent and stable mechanical conditions, while the right hemisphere might be specialized for impedance control, which imparts stability when mechanical conditions are unpredictable, or when stabilizing steady state position at the end of a movement.

## The dynamic dominance hypothesis provides a framework for understanding handedness within Roger's hypothesis

Over the past decade, our laboratory has developed a model of motor lateralization (Sainburg, [2002](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/#B70), [2005](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/#B71); Mutha et al., [2012](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/#B57), [2013](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4189332/#B58)) that can be viewed as a motor control analog for the model of brain lateralization developed and elaborated by Rogers and colleagues. This model is based on fundamental principles of control theory that account for a range of experimental findings in different tasks and task conditions. The dynamic dominance hypothesis of motor lateralization proposes that the left hemisphere (in right-handers) is specialized for processes that account for predictable dynamic conditions, in order to specify movements that are mechanically efficient, and have precise trajectories. In contrast, the right hemisphere (in right-handers) is specialized for impedance control mechanisms that ensure positional and velocity stabilization in the face of unpredictable mechanical events and conditions, and accuracy and stability of steady state postures. The former process assures mechanical efficiency and trajectory specificity under predictable conditions, while the latter imparts robustness under unpredictable conditions, as well as postural stability. Through studies in stroke patients with specific unilateral brain lesions, we have provided evidence that both processes contribute to the control of each arm. However, the hemisphere contralateral to a given arm imparts the greatest influence to that arm's performance. In terms of Roger's hypothesis, the right hemisphere is specialized for a system that ensures stability and rapid online responses to unexpected stimuli in the internal and external environments, while the left hemisphere exploits predictive processes to assure trajectory precision and mechanical efficiency when conditions are consistent and predictable.

1. Find in the text above synonyms of the following:
2. characteristic
3. give reason for, explain
4. well-known
5. conditions, situations
6. reacting
7. assumed, developed
8. allowing to guess what will happen
9. constant, regular
10. blockade, obstruction
11. conveys
12. equivalent
13. last-mentioned
14. being strong and healthy
15. are partly responsible for, lead to
16. employs, uses, applies

Sources:

http://[www.sciencedirect.com](http://www.sciencedirect.com), seen on 4 May 2015

McCarthy, M. and F. O’Dell, 2008 Academic Vocabulary in Use CUP