

Grades 9-12: Psychology

Identify the meaning, history and value of psychology and its role as a social science. [SS.912.P.1](#)

- 1 Define psychology as a discipline and identify its goals as a science. [SS.912.P.1.1](#)
- 2 Describe the emergence of psychology as a scientific discipline. [SS.912.P.1.2](#)
- 3 Describe perspectives employed to understand behavior and mental processes. [SS.912.P.1.3](#)
- 4 Discuss the value of both basic and applied psychological research with human and non-human animals. [SS.912.P.1.4](#)
- 5 Describe the major subfields of psychology. [SS.912.P.1.5](#)
- 6 Identify the important role psychology plays in benefiting society and improving people's lives. [SS.912.P.1.6](#)

Identify the role of the scientific method in psychology, common methods and pitfalls of data collection, and interpretation and the importance of ethics in psychological experimentation. [SS.912.P.2](#)

- 1 Describe the scientific method and its role in psychology. [SS.912.P.2.1](#)
- 2 Describe and compare a variety of quantitative (e.g., surveys, correlations, experiments) and qualitative (e.g., interviews, narratives, focus groups) research methods. [SS.912.P.2.2](#)
- 3 Define systematic procedures used to improve the validity of research findings, such as external validity. [SS.912.P.2.3](#)
- 4 Discuss how and why psychologists use non-human animals in research. [SS.912.P.2.4](#)
- 5 Identify ethical standards psychologists must address regarding research with human participants. [SS.912.P.2.5](#)
- 6 Identify ethical guidelines psychologists must address regarding research with non-human animals. [SS.912.P.2.6](#)
- 7 Define descriptive statistics and explain how they are used by psychological scientists. [SS.912.P.2.7](#)
- 8 Define forms of qualitative data and explain how they are used by psychological scientists. [SS.912.P.2.8](#)
- 9 Define correlation coefficients and explain their appropriate interpretation. [SS.912.P.2.9](#)

10 Interpret graphical representations of data as used in both quantitative and qualitative methods. SS.912.P.2.10

11 Explain other statistical concepts, such as statistical significance and effect size. SS.912.P.2.11

12 Explain how validity and reliability of observations, and measurements relate to data analysis. SS.912.P.2.12

Identify the biological bases of human and animal behavior. SS.912.P.3

1 Identify the major divisions and subdivisions of the human nervous system. SS.912.P.3.1

2 Identify the parts of the neuron and describe the basic process of neural transmission. SS.912.P.3.2

3 Differentiate between the structures and functions of the various parts of the central nervous system. SS.912.P.3.3

4 Describe lateralization of brain functions. SS.912.P.3.4

5 Discuss the mechanisms and the importance of plasticity of the nervous system. SS.912.P.3.5

6 Describe how the endocrine glands are linked to the nervous system. SS.912.P.3.6

7 Describe the effects of hormones on behavior and mental processes. SS.912.P.3.7

8 Describe hormone effects on the immune system. SS.912.P.3.8

9 Describe concepts in genetic transmission. SS.912.P.3.9

10 Describe the interactive effects of heredity and environment. SS.912.P.3.10

11 Explain how evolved tendencies influence behavior. SS.912.P.3.11

12 Identify tools used to study the nervous system. SS.912.P.3.12

13 Describe advances made in neuroscience. SS.912.P.3.13

14 Discuss issues related to scientific advances in neuroscience and genetics. SS.912.P.3.14

Demonstrate an understanding of the mechanisms of sensory systems and how sensory information is processed to develop our perceptions. SS.912.P.4

1 Discuss processes of sensation and perception and how they interact. SS.912.P.4.1

2 Explain the concepts of threshold and adaptation. SS.912.P.4.2

3 List forms of physical energy for which humans and non-human animals do and do not have sensory receptors. SS.912.P.4.3

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- 4 Describe the visual sensory system.** SS.912.P.4.4
 - 5 Describe the auditory sensory system.** SS.912.P.4.5
 - 6 Describe other sensory systems, such as olfaction, gustation, and somesthesia (e.g., skin senses, kinesthesia, vestibular sense).** SS.912.P.4.6
 - 7 Explain Gestalt principles of perception.** SS.912.P.4.7
 - 8 Describe binocular and monocular depth cues.** SS.912.P.4.8
 - 9 Describe the importance of perceptual constancies.** SS.912.P.4.9
 - 10 Describe perceptual illusions.** SS.912.P.4.10
 - 11 Describe the nature of attention.** SS.912.P.4.11
 - 12 Explain how experiences and expectations influence perception.** SS.912.P.4.12
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Identify various states of consciousness and the effects of psychoactive substances on consciousness. SS.912.P.5

- 1 Identify states of consciousness.** SS.912.P.5.1
- 2 Distinguish between processing that is conscious (i.e., explicit) and other processing that happens without conscious awareness (i.e., implicit).** SS.912.P.5.2
- 3 Describe the circadian rhythm and its relation to sleep.** SS.912.P.5.3
- 4 Describe the sleep cycle.** SS.912.P.5.4
- 5 Compare theories about the functions of sleep.** SS.912.P.5.5
- 6 Describe types of sleep disorders.** SS.912.P.5.6
- 7 Compare theories about the functions of dreams.** SS.912.P.5.7
- 8 Characterize the major categories of psychoactive drugs and their effects.** SS.912.P.5.8
- 9 Describe how psychoactive drugs act at the synaptic level.** SS.912.P.5.9
- 10 Evaluate the biological and psychological effects of psychoactive drugs.** SS.912.P.5.10
- 11 Explain how culture and expectations influence the use and experience of drugs.** SS.912.P.5.11
- 12 Describe meditation and relaxation and their effects.** SS.912.P.5.12
- 13 Describe hypnosis and controversies surrounding its nature and use.** SS.912.P.5.13

14 Describe flow states. SS.912.P.5.14

Develop an understanding of the progression of the human life span, and examine the biological, psychological, and social factors that contribute to growth. SS.912.P.6

1 Explain the interaction of environmental and biological factors in development, including the role of the brain in all aspects of development. SS.912.P.6.1

2 Explain issues of continuity versus discontinuity and stability versus change. SS.912.P.6.2

3 Distinguish methods used to study development. SS.912.P.6.3

4 Describe the role of sensitive and critical periods in development. SS.912.P.6.4

5 Discuss issues related to the end of life. SS.912.P.6.5

6 Discuss theories of cognitive development. SS.912.P.6.6

7 Discuss theories of moral development. SS.912.P.6.7

8 Discuss theories of social development. SS.912.P.6.8

9 Describe physical development from conception through birth and identify influences on prenatal development. SS.912.P.6.9

10 Describe newborns' reflexes, temperament, and abilities. SS.912.P.6.10

11 Describe physical and motor development in infancy. SS.912.P.6.11

12 Describe how infant perceptual abilities and intelligence develop. SS.912.P.6.12

13 Describe the development of attachment and the role of the caregiver. SS.912.P.6.13

14 Describe the development of communication and language in infancy. SS.912.P.6.14

15 Describe physical and motor development in childhood. SS.912.P.6.15

16 Describe how memory and thinking ability develops in childhood. SS.912.P.6.16

17 Describe social, cultural, and emotional development through childhood. SS.912.P.6.17

18 Identify major physical changes in adolescence. SS.912.P.6.18

19 Describe the development of reasoning and morality in adolescence. SS.912.P.6.19

20 Describe identity formation in adolescence. SS.912.P.6.20

21 Discuss the role of family and peers in adolescent development. SS.912.P.6.21

22 Identify major physical changes associated with adulthood and aging. SS.912.P.6.22

23 Describe cognitive changes in adulthood and aging. SS.912.P.6.23

24 Discuss social, cultural, and emotional issues in aging. SS.912.P.6.24

Develop an understanding on the theories of learning. SS.912.P.7

1 Describe the principles of classical conditioning. SS.912.P.7.1

2 Describe clinical and experimental examples of classical conditioning. SS.912.P.7.2

3 Apply classical conditioning to everyday life. SS.912.P.7.3

4 Describe the Law of Effect. SS.912.P.7.4

5 Describe the principles of operant conditioning. SS.912.P.7.5

6 Describe clinical and experimental examples of operant conditioning. SS.912.P.7.6

7 Apply operant conditioning to everyday life. SS.912.P.7.7

8 Describe the principles of observational and cognitive learning. SS.912.P.7.8

9 Apply observational and cognitive learning to everyday life. SS.912.P.7.9

Develop an understanding of the language acquisition process and the structure of language. SS.912.P.8

1 Describe the structure and function of language. SS.912.P.8.1

2 Discuss the relationship between language and thought. SS.912.P.8.2

3 Explain the process of language acquisition. SS.912.P.8.3

4 Discuss how acquisition of a second language can affect language development and possibly other cognitive processes. SS.912.P.8.4

5 Evaluate the theories of language acquisition. SS.912.P.8.5

6 Identify the brain structures associated with language. SS.912.P.8.6

7 Discuss how damage to the brain may affect language. SS.912.P.8.7

Identify the factors that influence human social interaction. SS.912.P.9

1 Describe attributional explanations of behavior. SS.912.P.9.1

2 Describe the relationship between attitudes (implicit and explicit) and behavior. SS.912.P.9.2

3 Identify persuasive methods used to change attitudes. SS.912.P.9.3

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- 4 Describe the power of the situation.** SS.912.P.9.4

 - 5 Describe the effects of others' presence on an individual's behavior.** SS.912.P.9.5

 - 6 Describe how group dynamics influence behavior.** SS.912.P.9.6

 - 7 Discuss how an individual influences group behavior.** SS.912.P.9.7

 - 8 Discuss the nature and effects of stereotyping, prejudice, and discrimination.** SS.912.P.9.8

 - 9 Describe determinants of prosocial behavior.** SS.912.P.9.9

 - 10 Discuss influences upon aggression and conflict.** SS.912.P.9.10

 - 11 Discuss factors influencing attraction and relationships.** SS.912.P.9.11

Identify various factors of culture and examine their effects on those living in a given culture. SS.912.P.10

- 1 Define culture and diversity.** SS.912.P.10.1

- 2 Identify how cultures change over time and vary within nations and internationally.** SS.912.P.10.2

- 3 Discuss the relationship between culture and conceptions of self and identity.** SS.912.P.10.3

- 4 Discuss psychological research examining race and ethnicity.** SS.912.P.10.4

- 5 Discuss psychological research examining socioeconomic status.** SS.912.P.10.5

- 6. Discuss how privilege and social power structures relate to stereotypes, prejudice, and discrimination.** SS.912.P.10.6

- 7 Discuss psychological research examining gender similarities and differences, and the impact of gender discrimination.** SS.912.P.10.7

- 8 Discuss the psychological research on gender and how the roles of women and men in societies are perceived.** SS.912.P.10.8

- 9 Examine how perspectives affect stereotypes and treatment of minority and majority groups in society.** SS.912.P.10.9

- 10 Discuss psychological research examining differences in individual cognitive and physical abilities.** SS.912.P.10.10

- 11 Examine societal treatment of people with disabilities, and the effect of treatment by others on individual identity/status.** SS.912.P.10.11

Understand the types, processes, and storage of memory, including

- 1 Identify factors that influence encoding.** SS.912.P.11.1

strategies for improving memory. SS.912.P.11

2 Characterize the difference between shallow (surface) and deep (elaborate) processing. SS.912.P.11.2

3 Discuss strategies for improving the encoding of memory. SS.912.P.11.3

4 Describe the differences between working memory and long-term memory. SS.912.P.11.4

5 Identify and explain biological processes related to how memory is stored. SS.912.P.11.5

6 Discuss types of memory and memory disorders (e.g., amnesias, dementias). SS.912.P.11.6

7 Discuss strategies for improving the storage of memories. SS.912.P.11.7

8 Analyze the importance of retrieval cues in memory. SS.912.P.11.8

9 Explain the role that interference plays in retrieval. SS.912.P.11.9

10 Discuss the factors influencing how memories are retrieved. SS.912.P.11.10

11 Explain how memories can be malleable. SS.912.P.11.11

12 Discuss strategies for improving the retrieval of memories. SS.912.P.11.12

Understand the types, processes, and storage of memory, including strategies for improving memory. SS.912.P.12

1 Define cognitive processes involved in understanding information. SS.912.P.12.1

2 Define processes involved in problem solving and decision making. SS.912.P.12.2

3 Discuss non-human problem-solving abilities. SS.912.P.12.3

4 Describe obstacles to problem solving. SS.912.P.12.4

5 Describe obstacles to decision making. SS.912.P.12.5

6 Describe obstacles to making good judgments. SS.912.P.12.6

Define intelligence and identify methods of assessment, analysis, and external influences on intelligence. SS.912.P.13

1 Discuss intelligence as a general factor. SS.912.P.13.1

2 Discuss alternative conceptualizations of intelligence. SS.912.P.13.2

3 Describe the extremes of intelligence. SS.912.P.13.3

4 Discuss the history of intelligence testing, including historical use and misuse in the context of fairness. SS.912.P.13.4

5 Identify current methods of assessing human abilities. SS.912.P.13.5

6. Identify measures of and data on reliability and validity for intelligence test scores. SS.912.P.13.6

7 Discuss issues related to the consequences of intelligence testing. SS.912.P.13.7

8 Discuss the influences of biological, cultural, and environmental factors on intelligence. SS.912.P.13.8

Understand the role and processes of human and non-human motivation. SS.912.P.14

1 Explain biologically based theories of motivation. SS.912.P.14.1

2 Explain cognitively based theories of motivation. SS.912.P.14.2

3 Explain humanistic theories of motivation. SS.912.P.14.3

4 Explain the role of culture in human motivation. SS.912.P.14.4

5 Discuss eating behavior. SS.912.P.14.5

6 Discuss achievement motivation. SS.912.P.14.6

7 Discuss other ways in which humans and non-human animals are motivated. SS.912.P.14.7

Understand the role and processes of human and non-human emotion. SS.912.P.15

1 Explain the biological and cognitive components of emotion. SS.912.P.15.1

2 Discuss psychological research on basic human emotions. SS.912.P.15.2

3 Differentiate among theories of emotional experience. SS.912.P.15.3

4 Explain how biological factors influence emotional interpretation and expression. SS.912.P.15.4

5 Explain how culture and gender influence emotional interpretation and expression. SS.912.P.15.5

6 Explain how other environmental factors influence emotional interpretation and expression. SS.912.P.15.6

7 Identify biological and environmental influences on the expression experience of negative emotions, such as fear. SS.912.P.15.7

8 Identify biological and environmental influences on the expression and experience of positive emotions, such as happiness. SS.912.P.15.8

Identify and categorize psychological disorders, including causes, symptoms, and impact to the individual and

1 Evaluate psychodynamic theories. SS.912.P.16.1

2 Evaluate trait theories. SS.912.P.16.2

3 Evaluate humanistic theories. SS.912.P.16.3

those around
them. SS.912.P.16

4 Evaluate social-cognitive theories. SS.912.P.16.4

5 Differentiate personality assessment techniques. SS.912.P.16.5

6 Discuss the reliability and validity of personality assessment techniques. SS.912.P.16.6

7 Discuss biological and situational influences. SS.912.P.16.7

8 Discuss stability and change. SS.912.P.16.8

9 Discuss connection to health and work on personality. SS.912.P.16.9

10 Discuss self-concept. SS.912.P.16.10

11 Analyze how individualistic and collectivistic cultural perspectives relate to personality. SS.912.P.16.11

Identify and categorize
psychological disorders,
including examples of
the causes, diagnosis
and impact to family and
community. SS.912.P.17

1 Define psychologically abnormal behavior. SS.912.P.17.1

2 Describe historical and cross-cultural views of abnormality. SS.912.P.17.2

3 Describe major models of abnormality. SS.912.P.17.3

4 Discuss how stigma relates to abnormal behavior. SS.912.P.17.4

5 Discuss the impact of psychological disorders on the individual, family, and society. SS.912.P.17.5

6 Describe the classification of psychological disorders. SS.912.P.17.6

7 Discuss the challenges associated with diagnosis. SS.912.P.17.7

8 Describe symptoms and causes of major categories of psychological disorders (i.e., schizophrenic, mood, anxiety, personality disorders). SS.912.P.17.8

9 Evaluate how different factors influence an individual's experience of psychological disorders. SS.912.P.17.9

Explore the history,
methods and efficacy of
treating psychological
disorders, including
support
resources. SS.912.P.18

1 Explain how psychological treatments have changed over time and among cultures. SS.912.P.18.1

2 Match methods of treatment to psychological perspectives. SS.912.P.18.2

3 Explain why psychologists use a variety of treatment options. SS.912.P.18.3

4 Identify biomedical treatments. SS.912.P.18.4

5 Identify psychological treatments. SS.912.P.18.5

6 Describe appropriate treatments for different age groups. SS.912.P.18.6

7 Evaluate the efficacy of treatments for particular disorders. SS.912.P.18.7

8 Identify other factors that improve the efficacy of treatment. SS.912.P.18.8

9 Identify treatment providers for psychological disorders and the training required for each. SS.912.P.18.9

10 Identify ethical challenges involved in delivery of treatment. SS.912.P.18.10

11 Identify national and local resources available to support individuals with psychological disorders and their families (e.g., NAMI and support groups). SS.912.P.18.11

Define stress and explain the physiological and psychological effects of it on the human body, and identify strategies for coping with or minimizing it. SS.912.P.19

1 Define stress as a psychophysiological reaction. SS.912.P.19.1

2 Identify and explain potential sources of stress. SS.912.P.19.2

3 Explain physiological and psychological consequences of stress for health. SS.912.P.19.3

4 Identify and explain physiological, cognitive, and behavioral strategies to deal with stress. SS.912.P.19.4

5 Identify ways to promote mental health and physical fitness. SS.912.P.19.5

6 Describe the characteristics of and factors that promote resilience and optimism. SS.912.P.19.6

7 Distinguish between effective and ineffective means of dealing with stressors and other health issues. SS.912.P.19.7

Identify careers in psychological science, including pathways and resources as well as the impact to both domestic, and global issues. SS.912.P.20

1 Identify careers in psychological science and practice. SS.912.P.20.1

2 Identify resources to help select psychology programs for further study. SS.912.P.20.2

3 Identify degree requirements for psychologists and psychology-related careers. SS.912.P.20.3

4 Identify careers related to psychology. SS.912.P.20.4

5 Discuss ways in which psychological science addresses domestic and global issues. SS.912.P.20.5

6 Identify careers in psychological science that have evolved as a result of domestic and global issues. SS.912.P.20.6