



Principles of Biomedical Science

Virtual Learning

9-12 / PLTW[®] PBS

April , 28 2020



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Lesson: April 28 2020

Objective/Learning Target:

Students will be able to: Identify, describe, and evaluate the symptoms and care for a CVA, cerebrovascular accident (stroke). (*Reference: PLTW[®] 4.4.1 Unblocking the Vessels*)



Let's Get Started (Bell Ringer):

Watch Videos on Stroke Information:

[What happens during a stroke? - Vaibhav Goswami](#)

[Stroke \(for patients & families\)](#)



Lesson/Activity:

Let's start by looking at the the Signs of Stroke in both Men and Women, we can't help if we don't know what we are looking for. Use your resource to find the Signs of Stroke in both Men and Women. Write these down in your notebook or seperate piece of paper. When you are doing your research look for the concept of Acting F.A.S.T. this is a good way to remember.



Answers:

Answers will vary for signs between men and women but will involve the following ideas: numbness, confusion, seeing, walking, and headaches.

F.A.S.T. (I have given you the basics you provide the details)

F - Face

A - Arms

S - Speech

T - Time



Lesson/Activity Continued:

Lets start by looking at the two major types off strokes: Ischemic and Hemorrhagic it is your job in this lesson to do your research to determine the difference between them and explain what doctors would do to treat each one. Please write what you have found out about differnces between the two types of strokes and how you would treat them in your notebook, or on a seperate piece of paper. There are many resources for this topic good luck.



Answers:

Ischemic Stroke

happens when a clot blocks a vessel supplying blood to the brain. It's the most common type, accounting for 87% of all strokes. The treatment goal is to bust or remove the clot.

Hemorrhagic Stroke

is caused by a rupture in a blood vessel within the brain. Fewer strokes happen as the result of a rupture. The treatment goal is to stop the bleeding.

Treatment will be determined by student ideas should include ideas that come in the following categories:

Medication Treatments:

Mechanical Treatments:



Lesson/Activity Continued:

Recovery and life after a stroke can be a very daunting task for the patient along with anyone involved in the process of long term recovery. It is your job in this lesson to develop a recovery plan for a person who has recently had a stroke. There are many resources out there for this and I am suggesting you do some research on this topic to gather ideas. I am providing you one resource to get you started. [Strokecenter.org](https://www.strokecenter.org) Collect your research for your “recovery plan” in you notebook or on a seperate piece of paper.



Answers:

Ideas for Major topics to cover:

- Recovery Treatments
- Rehabilitation (types of therapy)
- Acute Care
- Preventing Future Strokes
- Depression after Stroke
- Disabilities Associated with Stroke
- Preparing a Living Space
- Special Equipment



Practice:

Additional Resources to Explore:

[Stroke Educations Toolkit](#): Everything you ever wanted to learn and more.

[Caregiver Guide to Stroke](#): Great Guide and Practical Tips



Answers:

Answers to Resources can be found at:

[Stroke Educations Toolkit](#)

[Caregiver Guide to Stroke](#)



Additional Practice:

Check Your Understanding try these online quizzes about strokes.

Try this 11 question quiz over Stroke it will show you your results when you are done. [MedicineNet Stroke Quiz: Test Your Medical IQ](#)

[Stroke \(CVA\) NCLEX Questions \(21\)](#)



Answers:

Answers are provided at end of quiz