

#### **PART A**

Using what you have learned about Oscar Peterson, complete the graphic organizer below. You may conduct additional research as necessary. A good resource to start with is this article from CBC: "Canadian jazz great Oscar Peterson dies" (https://www.cbc. ca/news/entertainment/canadian-jazz-great-oscar-peterson-dies-1.646844).

#### **Oscar Peterson**

1925 (Montreal, Quebec) – 2007 (Mississauga, Ontario)

#### Who was Oscar Peterson? How did the world around him shape

him as a person?

#### What was his passion?

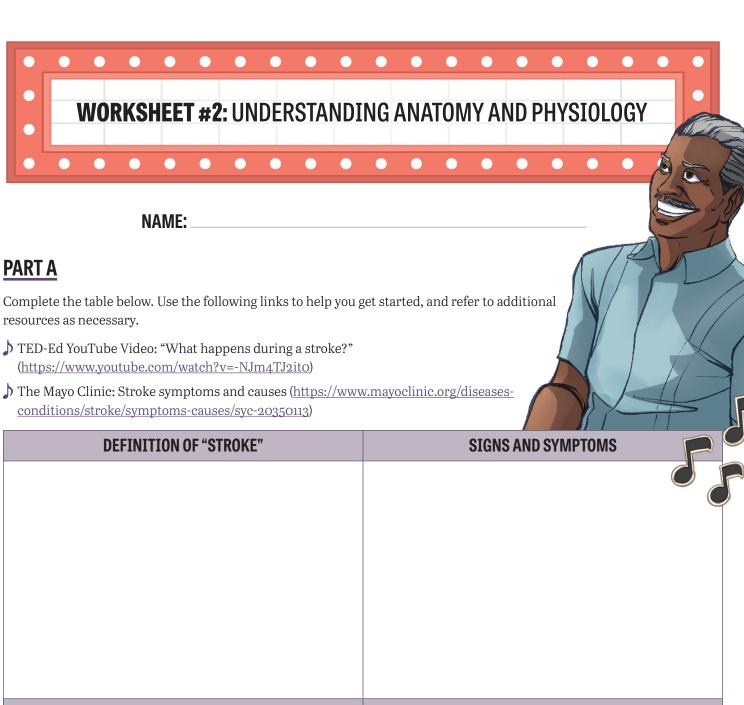
How did the world around him, along with his personality, shape his music?

#### This period in history

What was the world around Oscar Peterson like during his lifetime?

After completing the graphic organizer about Oscar Peterson, you will fill out the organizer below about yourself. Are there any similarities between how your world shapes you and how Oscar's world shaped him?

Name: Born 20 - Present Who are you? What is your passion? How does the world around you How does the world around you, shape you as a person? along with your personality, shape your passion? A picture of you This period in history What has the world around you been like during your lifetime?



Read the case study entitled "A Case of Cerebrovascular Accident" (https://www.nsta.org/ncss-case-study/case-cerebrovascular-accident) and answer the questions at the end. You may need to conduct further research in order to do so.

## **PART C**

Read the following article to learn more about Oscar Peterson's stroke:

→ "Pianist dazzled jazz world with technique, creativity" (https://www.latimes.com/archives/la-xpm-2007-dec-25-me-peterson25-story.html)

#### **PART D**

Using the information you have learned in Parts A-C, make a hypothesis based on the question below:





# PART A

How did Oscar Peterson's stroke affect his music? Use the following video evidence below to compare.

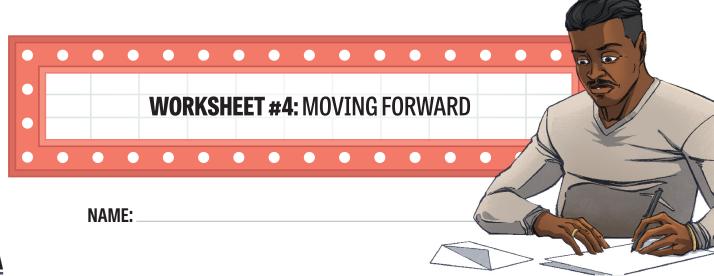
VIDEO ANALYSIS	PRE-STROKE Oscar Peterson, Count Basie, Joe Pass (1980) <a href="https://jazzonthetube.com/video/words-music-1980/">https://jazzonthetube.com/video/words-music-1980/</a>	POST-STROKE Oscar Peterson Quartet (2004) https://www.youtube.com/watch?v=R-rfw_0q5_w
HAND PLACEMENT ON THE KEYS		
COMPLEXITY OF OSCAR'S PIANO PLAYING		
RELIANCE ON HIS BAND MEMBERS		
OTHER THINGS I NOTICED		

Building **resiliency** is an important skill in order to endure hardships and overcome challenges in your life. Even after Oscar Peterson suffered a stroke, he showed resiliency and put in a lot of hard work so that he could continue to follow his passion.

Use the article below to identify resiliency skills. Which ones do you use (strengths) and which ones do you continue to work on (challenges)?

The Mayo Clinic: "Resilience: Build skills to endure hardship" (<a href="https://www.mayoclinic.org/tests-procedures/resilience-training/in-depth/resilience/art-20046311">https://www.mayoclinic.org/tests-procedures/resilience-training/in-depth/resilience/art-20046311</a>)

RESILIENCY SKILLS	MY STRENGTHS	MY CHALLENGES



## **PART A**

Since Oscar Peterson's stroke in 1993, there have been enhancements in the technologies that detect and treat strokes. Artificial Intelligence (AI), for example, can be used in many ways to assist doctors with all levels of stroke care, from implementing a medical diagnosis, to consultation and rehabilitation.

Scan through the following journal article and list 5 ways AI can be used for medical purposes:

prove the Management of A Methods (https://pmc.nch		ogies, Artificial Intelligenc	e, and New

Let's take this opportunity to use Artificial Intelligence (AI) and ask questions about strokes.

Using the code given by your teacher, access the science chatbot on schoolai.com to gain more insight on strokes, their
symptoms, how to diagnose them, and the prognosis when a stroke has been detected.

After you have finished your conversation with the chatbot, write a reflection on what you have learned about strokes. How might this information apply to Oscar Peterson?	
Get into groups and discuss: What are the ethical implications of using AI in a medical context? Record your findings below.	

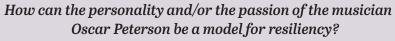




NAME:

## **PART A**

**Class Inquiry Question:** 





support your answer.	

Record your response to the class inquiry question below. Be sure to use what you have learned from Worksheets #1-4 to

#### **Individual Inquiry Question:**

How can I use my learning of Oscar Peterson to better understand myself, become a more resilient person, and thrive in my community?

Choose one of these options below as the catalyst to answer the individual inquiry question:

- Lyrics to a song that represents your own life journey
- ▶ Artwork/picture that encapsulates your identity and learning
- ▶ Musician/artist/leader who emulates characteristics you strive to achieve
- ▶ Medical/technological advancement that helps overcome personal barriers
- → Other



# A Case of Cerebrovascular Accident

by

David F. Dean, Department of Biology, Spring Hill College

#### **Case Presentation**

Samuel Dexter is a 52-year-old African-American man who is both a husband and father. He is moderately obese (BMI of 32), and has smoked two packs of cigarettes a day for the past 38 years. He awakes one morning with weakness on his right side. He is a bit confused, sees double, and his speech is slurred. When he attempts to walk to the bathroom, he stumbles a few times and falls once. His wife suspects that he has suffered a stroke and calls 911. Emergency personnel arrive within minutes of her call and transport Samuel to the emergency room of the nearest hospital.

Upon examination by the emergency room physician, Samuel is found to have right hemiparesis and diminished pinprick and two-point discrimination on the right side of his head and arm. His deep tendon reflexes are brisk on the right and there is a positive Babinski reflex on the right. He has difficulty articulating answers to the questions he is asked, speaking only a few words and frequently



responding with just a verb or a noun. His ability to respond to complicated verbal commands, whether spoken or written, is not impaired. In addition, his systemic blood pressure was found to be 160/100. A serum lipid profile was performed and the results are shown in the table below.

Table 1. Serum Lipid Profile Results		
Triglycerides	220 mg/dl	
Total Cholesterol	280 mg/dl	
LDL	210 mg/dl	
HDL	30 mg/dl	

#### **Ouestions**

- 1. Define the terms ischemia and infarction.
- 2. What is a stroke? Describe the mechanism(s) by which strokes occur.
- 3. Define the term *collateral blood flow*, and describe how this and other factors affect the development of stroke.
- 4. List the risk factors that predispose an individual to suffer a stroke. What are the five warning signs that indicate an individual is having a stroke? Which of the risk factors and warning signs did Mr. Dexter possess based on the clinical history?
- 5. What are *Brodman areas* and how do they relate to the neurological deficits that occur as the result of stroke?
- 6. What is the functional relationship between Broca's area and Wernicke's area?

- 7. Define the terms *ipsilateral* and *contralateral* as they apply to the functionality of the central nervous system.
- 8. Explain the significance of the findings of brisk deep tendon reflexes and Babinski sign on the affected side of Samuel's body.
- 9. Based upon the historical and physical exam findings, what specific area(s) of Samuel's brain have been damaged as the result of his stroke?
- 10. Describe the means by which individuals who survive a stroke regain at least part of their lost abilities.

Image Credit: Based on *Peasant Sitting At A Table* by Vincent Van Gogh, 1885.

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