Lesson 1 Progress Check

- Due No due date
- Points 100
- Questions 10
- Time Limit 15 Minutes
- Allowed Attempts Unlimited

Instructions

This quiz checks your understanding of lesson concepts.

- This is a timed assessment.
- You are allowed multiple attempts.
- Minimum passing score is 80%.

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	15 minutes	60 out of 100

Correct answers are hidden.

Score for this attempt: 60 out of 100
Submitted Nov 1 at 5:30am
This attempt took 15 minutes.

Question 1

10 / 10 pts

In his effort to build a coherent US space effort, President Eisenhower appointed James R. Killian, president of the Massachusetts Institute of Technology, to be his scientific advisor. Dr. Killian did which of the following to lead the nation's space program, and what was the impact?

- Dr. Killian proposed the National Aeronautics and Space Act, which was adopted on 1 Oct 1958, and officially created the National Aeronautics and Space Administration (NASA) for civilian leadership of aeronautical and space research.

Dr. Killian, the President's scientific advisor, provided coherency for the US space effort through the proposal of the National Aeronautics and Space Act, leading to the establishment of NASA. NASA's establishment defined the overall US space paradigm, which largely viewed space as an opportunity for peaceful utility. (AU-18 *Space Primer,* (2009), page 10)

- Dr. Killian lobbied on behalf of the military to maintain control of managing the national space effort; however, he had to convince President Eisenhower to rescind his initial "Space for Peace" policy.
- Dr. Killian worked with President Eisenhower to establish the Advanced Research Projects Agency (ARPA), which pursued space exploration research. ARPA was essentially the first official US space agency.
- Dr. Killian established the National Advisory Committee on Aeronautics (NACA), which was ahead of all other US organizations in the field of aeronautics, and ultimately subsumed all national aeronautical and space efforts before the establishment of US Space Command.

Question 2

10 / 10 pts

In January 2004, what objective did President Bush give to NASA after the Space Transportation System program drew to a close?

- President Bush announced a renewed partnership between NASA and industry to energize space exploration and commercialization.
- President Bush announced that NASA would return to the moon no later than 2020.

In January 2004, President Bush announced a new direction for NASA after the STS program came to a close and as the International Space Station was projected for completion in 2010. President Bush gave NASA the objective to return to the moon no later than 2020. (AU-18 *Space Primer*, (2009), page 22)

- President Bush announced the eventual disestablishment of NASA, with an intent to reorganize all government space efforts under the US Air Force.
- President Bush announced that NASA would partner with the US Air Force to colonize Mars no later than 2040.

IncorrectQuestion 3

0 / 10 pts

In the mid-1950s, why did the Technological Capabilities Panel urge the U.S. to launch a small scientific satellite into space?

The Technological Capabilities Panel urged the U.S. to launch a small scientific satellite to discourage the Soviet Union from investing in its space launch technology.

The Technological Capabilities Panel urged the U.S. to launch a small scientific satellite to help differentiate the air and space domains, and to build the foundation for a future military space branch similar to the US Air Force.

The Technological Capabilities Panel urged the U.S. to launch a small scientific satellite to establish the role of reconnaissance overflight in US space operations.

Reconnaissance may have been on the minds of some on the Technological Capabilities Panel; however, the intent of the launch was to establish the principle of freedom of space and the right of satellite overflight in international law. (*High Frontier: The U.S. Air Force and the Military Space Program*, page 8)

The Technological Capabilities Panel urged the U.S. to launch a small scientific satellite to establish the precedent of “freedom of space,” presumably to allow US military satellites to orbit over any country without prior permission.

Question 4

10 / 10 pts

According to Peter Pry, which of the following is a "far bigger threat" to U.S. satellites than Russian or Chinese kinetic anti-satellite weaponry?

- The growing volume of space debris in key orbital paths.
- Use of cyber attack to disable or take over U.S. satellites.
- Use of directed energy weapons such as lasers.
- Use of a high altitude nuclear electromagnetic pulse (EMP).

This Answer is Correct.

Question 5

10 / 10 pts

According to Peter Pry, what is one plausible reason Russia and China object so strongly to U.S. "militarization of space"?

Because they may have already weaponized space with nuclear-armed satellites, and could rapidly deploy space-based missile defenses in the event of war.

Because they would have no choice but to follow suit, weaponizing space themselves in an inevitable "space arms race" that holds no favorable end state.

Because their long-term strategic aims have become more aligned with those of the international community, which is overwhelmingly against conflict in space.

Because they realize they could offer no countermove--technology and resource limitations prevent them from being able to militarize space on a pace with the U.S.

This Answer is Correct.

IncorrectQuestion 6

0 / 10 pts

According to the *Space Capstone Publication*, an understanding of military spacepower must encompass three simultaneous and interrelated dimensions. Those dimensions are:

Physical, Cyber, and Cognitive

Cyber, Orbital, and Cognitive

Geocentric, Cyber, and Cognitive

Physical, Network, and Cognitive

This answer is incorrect. “A complete understanding of military spacepower must encompass the domain’s physical, network, and cognitive dimensions.” (Source: *Space Capstone Publication* (2020), Chapter 3, page 23)

IncorrectQuestion 7

0 / 10 pts

According to the US *National Security Space Strategy Unclassified Summary* (2011), how will the U.S. address competition in the space domain?

The U.S. will address competition by enhancing its own capabilities, improving its acquisition processes, fostering a healthy US industrial base, and strengthening collaboration and cooperation.

The U.S. will address competition by dissuading and imposing international costs on aggressive behavior, and creating coalitions/alliances of responsible space-faring nations.

According to the National Space Security Strategy (2011), the U.S. will address competition by enhancing its own capabilities, improving its acquisition processes, fostering a healthy US industrial base, and strengthening collaboration and cooperation. The U.S. will address the contested environment by dissuading and imposing international costs on aggressive behavior, and creating coalitions/alliances of responsible space-faring nations. (*National Security Space Strategy*, (2011), page 13)

All of the answers are correct.

The U.S. will address competition by enhancing space situational awareness, and fostering greater transparency and information sharing.

Question 8

10 / 10 pts

In Szymanski's article, "Techniques for Great Power Space War," which of the following best summarizes the author's view of the concept of center of gravity?

The center of gravity concept _____.

partially applies to space in some respects; it should be kept in mind in strategy development while not becoming a centerpiece; and space planners generally should be more familiar with it.

does not apply to space as it does to terrestrial warfare; it should not be forced into a space warfare strategy; and in any case it is already well understood by most space battle management planners.

must be re-imagined to apply to space warfare; even without it, space warfare strategies can be fully successful; and space battle management planners should work to develop their own concept applicable to space.

applies to space just as much as to terrestrial warfare; it is important for creating and executing a space warfare strategy; and it is not well understood in current space battle management planning.

Your answer is correct.

Question 9

10 / 10 pts

According to the US *National Security Space Strategy Unclassified Summary* (2011), in what way will the U.S. “seek to enhance our national capability to dissuade and deter the development, testing, and employment of counterspace systems and prevent and deter aggression against space systems and supporting infrastructure that support US national security”?

- The US will improve its ability to attribute attacks against space assets.
- All of the answers are correct.

According to the *National Security Space Strategy Unclassified Summary* (2011), the multilayered approach to prevent and deter aggression in space includes supporting diplomatic efforts to promote norms of responsible behavior in space; pursuing international partnerships that encourage potential adversary restraint; improving our ability to attribute attacks; strengthening the resilience of our architectures to deny the benefits of an attack; and retaining the right to respond, should deterrence fail. (*National Security Space Strategy Unclassified Summary* (2011), page 10)

- The US will support diplomatic efforts to promote norms of responsible behavior in space.
- The US will retain the right to respond if deterrence fails.

IncorrectQuestion 10

0 / 10 pts

In Szymanski's article, "Techniques for Great Power Space War," which of the following best summarizes the author's position on applying the principles of war to space?

Classic military principles _____.

- can and should be applied to space warfare; every facet of war in space exactly mirrors war on land, at sea, or in the air.
- cannot be applied to space warfare; as a peaceful domain, the introduction of such principles to space risks dangerous escalation.
- can and should be applied to space warfare; however, there are aspects of space that should be better understood when applying them.

cannot be applied to space warfare; however, a re-examination of the great airpower theorists should drive new space-specific principles of war.

Your answer is incorrect. Please review Lesson 1 Objective 3.

Quiz Score: 60 out of 100