

## Fundamentals of Flight Word Search

Can you find the names of NASA's two newest X-planes hidden in the puzzle?

Р	J	Z	Х	R	В	Т	0	L	I	Р	J	Н	0	Ρ	J	R
V	В	F	Y	А	W	Ν	U	R	В	J	J	W	G	L	U	I
A	L	Т	Ι	Т	U	D	Е	В	Ρ	Е	Q	Ρ	Х	Ι	L	S
E	М	Ι	S	S	Ι	0	Ν	S	Т	Т	R	С	R	А	Е	G
W	А	А	D	Т	Т	В	Е	R	Ν	0	U	L	L	Ι	С	W
R	А	D	R	0	Ν	Е	0	Y	Ρ	Ρ	L	А	Т	Т	0	G
С	Е	Y	Е	Κ	S	Ρ	Q	Е	Т	G	Ν	R	S	С	Ν	Ν
V	В	Т	Κ	Ν	R	V	L	Κ	Ρ	Ι	0	D	В	D	Т	I
В	0	W	Ρ	Ι	0	L	L	Ι	L	Ρ	V	R	R	R	R	D
Т	S	Ν	А	0	Е	Ι	Т	М	Ι	J	0	А	L	Х	А	Ν
R	Н	0	М	R	С	С	S	Т	А	Т	Ρ	G	R	Y	Ι	А
U	S	R	J	V	Н	D	R	Е	F	Х	S	Q	W	G	L	L
D	Е	Е	U	Ρ	R	Е	А	0	F	Ι	W	S	Ι	Ι	V	Н
D	U	L	S	S	V	В	0	U	Н	R	L	Е	Е	F	Ν	Т
E	А	Ι	М	U	Т	С	U	С	Q	V	L	М	L	U	Κ	D
R	S	А	R	Е	Η	Т	A	Е	W	W	I	Ν	G	L	Q	V
□ Airp	□ Airport □ Landing						<ul><li>☐ Thrust</li><li>☐ Vertiport</li><li>☐ Weather</li></ul>					Ma				



□ Bernoulli

□ Contrail

□ Elevator

□ Emissions

□ Drag □ Drone

□ Gear

□ Gravity

□ Propeller □ Quadcopter

□ Roll

□ Rudder

□ Runway

□ Noise

□ Pilot

□ Pitch

□ Wing □ Yaw



Weight

□ Wind

## DEFINITIONS

Aileron-located on the wings; they generate roll

**Airport**—where most airplanes land and take off from

Altitude – how high an airplane is flying

**Bernoulli**—a Swiss scientist who studied how air moves

**Contrail**—cloud made when water vapor condenses and freezes around small particles in aircraft exhaust

**Drag**—caused by air resistance; the force that acts opposite to the direction of motion

**Drone**—an unmanned aerial vehicle (UAV) used to perform different functions

**Elevator**—located on the tail section of airplane; controls the pitch of the plane

**Emissions**—gases and particles found in aircraft exhaust; NASA is working to lower them.

**Gravity**—the force exerted on all objects by the Earth and other objects with mass

Jet-a type of engine used to power aircraft

Landing gear—the wheels and support structures used to support airplanes while on the ground

**Lift**—created mainly by the wings; the force that holds an airplane in the air

**Noise**—sound created by airplanes; NASA is working to lower aircraft noise.

**Pilot**—the person who flies the airplane

**Pitch**—the up and down movement of the nose of an airplane

**Propeller**—pushes or pulls air; used to increase the speed of an airplane

Quadcopter - a drone with four propellers

**Roll**—up and down movement of the wings; causes the plane to rotate right or left

**Rudder**—located on tail of the plane; determines whether the airplane's nose moves left or right

**Runway**—rectangular area of land designed for airplanes to land and take off

**Thrust**—the force that moves an aircraft in the direction of its motion

**Vertiport**—often found near cities; where aircraft land and take off vertically (up and down)

**Weather**—the condition of the atmosphere in a specific time and place

**Weight**—the downward force exerted on a plane by the Earth's gravity

**Wind**—the movement of the air; important that pilots account for it while flying

**Wing**—the part of the plane that creates most of the lift when air passes over it

Yaw-the turning of a plane created by the rudder

National Aeronautics and Space Administration

NASA Headquarters 300 E. Street, SW Washington, DC 20546

www.nasa.gov