



## Middle School Science Teacher

**Job Title: Middle School Science Teacher**

**Reports to: Principal**

### **Position Overview:**

We are seeking a dynamic and innovative Middle School Science Teacher to inspire and educate students in Life Science, Earth Science, and Physical Science. This role requires an educator committed to fostering a passion for science, integrating technology, and ensuring that students understand the real-world applications of scientific principles. The ideal candidate will create an engaging and challenging classroom environment, emphasizing hands-on learning, critical thinking, and interdisciplinary connections with STEM fields.

### **Key Responsibilities:**

#### **Curriculum Development & STEM Integration:**

- Design and implement a comprehensive science curriculum that aligns with Florida State Standards and integrates STEM concepts across Life Science, Earth Science, and Physical Science.
- Emphasize the interconnectedness of science with technology, engineering, and mathematics through project-based learning, cross-curricular activities, and real-world applications.
- Regularly update and innovate the curriculum to incorporate emerging scientific trends, ensuring that students stay at the forefront of current scientific developments and technological advances.

#### **Hands-On, Project-Based Learning:**

- Lead hands-on science experiments and projects that enable students to explore scientific concepts in real-world scenarios, fostering critical thinking, problem-solving, and collaboration.
- Encourage students to use scientific tools, simulation software, and technology to explore complex scientific issues.
- Provide opportunities for students to design, test, and refine solutions to real-world problems, empowering them to think like scientists, engineers, and technologists.

#### **Interdisciplinary Collaboration & Active Learning:**

- Collaborate with science, technology, engineering, and math (STEM) educators to create interdisciplinary projects and experiences that link scientific principles to real-world applications.
- Implement active learning strategies, such as flipped classrooms, inquiry-based learning, and group collaboration, to encourage engagement and curiosity in STEM fields.
- Foster a classroom environment that values exploration, experimentation, and interdisciplinary learning, encouraging students to connect scientific concepts to other disciplines.



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### **Classroom Environment & Student-Centered Approach:**

- Cultivate a safe, inclusive, and stimulating classroom atmosphere where students feel encouraged to take risks, ask questions, and explore new ideas.
- Apply student-centered teaching methods to ensure all students are actively engaged, using interactive lessons, collaborative group work, and real-world applications.
- Promote a growth mindset, helping students view challenges as opportunities for growth and learning.

### **Classroom Management:**

- Establish and maintain a structured, organized, and respectful classroom environment that supports high levels of student engagement and mutual respect.
- Differentiate instruction to meet the diverse needs of all students, providing personalized support and ensuring every student has access to the necessary tools and resources for success.

### **Technology Integration & Innovation:**

- Integrate innovative technologies, including coding platforms, virtual simulations, and interactive software, to enhance student understanding of scientific concepts.
- Encourage students to use technology to analyze and model scientific phenomena, fostering their ability to solve complex problems using digital tools.
- Stay up-to-date with new technological trends and educational practices, applying cutting-edge tools and techniques to inspire creativity and innovation in the classroom.

### **Assessment & Growth-Focused Feedback:**

- Develop and administer a variety of assessments, such as quizzes, tests, projects, and presentations, to evaluate student progress and understanding.
- Provide timely and constructive feedback to guide student improvement and personal growth.
- Use assessment data to inform instructional decisions, offering targeted enrichment or interventions to support students' development and academic achievement.

### **STEM Mentorship & Extracurricular Activities:**

- Lead or participate in extracurricular STEM-related activities, such as science fairs, coding challenges, and robotics clubs, to give students opportunities to apply their learning beyond the classroom.
- Provide mentorship to students participating in STEM competitions, helping them design, test, and refine their scientific ideas and solutions.
- Inspire students to pursue STEM careers by sharing real-world insights and serving as a role model for their academic and professional development.

### **Professional Development & STEM Leadership:**



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- Actively engage in ongoing professional development to stay abreast of the latest trends in STEM education and effective teaching methods.
- Participate in professional STEM networks, conferences, and workshops to deepen expertise in science instruction and technology integration.
- Advocate for STEM education within the school community, helping to shape the school's vision for a dynamic, future-focused learning environment.

### **Collaboration & School Culture:**

- Work closely with school leadership, colleagues, and parents to align instructional practices with the school's STEM-focused mission and initiatives.
- Contribute ideas and feedback during departmental and school-wide meetings to enhance curriculum development and student outcomes.
- Foster a collaborative school culture that values creativity, teamwork, and a shared commitment to academic excellence and innovation.

### **Compliance & Educational Standards:**

- Ensure that all science instruction complies with state and federal standards while meeting the needs of diverse learners.
- Maintain accurate records of student performance, attendance, and grades in line with district policies.
- Prepare students for standardized assessments by aligning instruction with required scientific competencies and test readiness.

### **Emergency Preparedness & Safety:**

- Adhere to school safety protocols, including emergency drills, lockdown procedures, and maintaining a secure classroom environment at all times.
- Actively contribute to school-wide safety initiatives and maintain a safe, supportive school atmosphere.

### **Knowledge, Skills, and Abilities (KSAs)**

#### **Knowledge:**

- Comprehensive knowledge of middle school science content, including life science, physical science, earth science, and environmental science, aligned with the Florida State Standards (FSS) and Next Generation Science Standards (NGSS).
- Strong understanding of scientific principles, concepts, and inquiry-based learning approaches to facilitate students' comprehension of complex topics.
- Familiarity with various teaching strategies, including project-based learning, hands-on experiments, and lab activities that encourage active exploration and student engagement.



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- Knowledge of the use and integration of educational technologies, such as virtual simulations, scientific software, and digital tools, to enhance instruction and student learning.
- Understanding of formative and summative assessments to evaluate student progress, including practical lab reports, quizzes, tests, presentations, and projects.
- Ability to implement differentiated instruction and create inclusive lesson plans that cater to students with varying levels of academic abilities, including students with special needs and English language learners.
- Knowledge of classroom safety protocols and procedures, especially when conducting laboratory experiments and hands-on activities.
- Familiarity with interdisciplinary connections between science and other subject areas such as mathematics, technology, and engineering.

### **Skills:**

- Strong communication skills, both written and verbal, to explain scientific concepts in a clear, engaging, and accessible manner for middle school students.
- Ability to design and implement interactive, hands-on lessons and experiments that engage students in real-world scientific inquiry.
- Proficient in using educational technology, including data collection tools, digital simulations, and interactive websites to support science instruction.
- Strong organizational skills to plan and prepare lessons, manage classroom materials, and maintain accurate records of student progress and assessments.
- Effective classroom management skills to create a productive, safe, and respectful learning environment that fosters student participation and collaboration.
- Critical thinking and problem-solving skills to guide students in developing hypotheses, conducting experiments, analyzing data, and drawing conclusions.
- Ability to differentiate instruction and provide personalized support to students with diverse learning needs and abilities, ensuring equitable access to science education.
- Skilled in using data to assess student learning, monitor progress, and adjust instruction accordingly to meet individual and group needs.
- Ability to collaborate with colleagues in planning cross-curricular projects and activities that integrate science with other subjects.

### **Abilities:**

- The ability to design and implement engaging, standards-based science curricula that incorporate inquiry, hands-on experiments, and project-based learning to make science concepts relatable and exciting for students.
- The ability to foster an environment of scientific inquiry, encouraging students to ask questions, design experiments, and explore the natural world through hands-on experiences.
- The ability to use scientific data and evidence to guide student learning, evaluate understanding, and provide constructive feedback.
- The ability to develop students' critical thinking skills by helping them analyze scientific problems, interpret data, and draw conclusions based on evidence.



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- The ability to manage a classroom during lab activities and experiments, ensuring safety protocols are followed while maintaining an orderly and productive learning environment.
- The ability to integrate technology into science lessons effectively, using digital tools for simulations, research, and collaborative learning.
- The ability to establish a positive, inclusive classroom environment where students feel encouraged to take risks, collaborate, and engage in scientific exploration.
- The ability to differentiate instruction and support diverse learners, including students with special needs, English language learners, and gifted students, ensuring all students have the opportunity to succeed.
- The ability to collaborate with other science teachers and school staff to develop interdisciplinary projects, field trips, and extracurricular activities that enhance the science curriculum.

### **Physical Requirements:**

- Ability to stand, walk, and move around the classroom and laboratory for extended periods.
- Ability to lift and carry science materials, lab equipment, and supplies up to 25 lbs.
- Dexterity to operate scientific instruments, technology devices, writing instruments, and other instructional tools.
- Ability to supervise students during lab activities, outdoor experiments, or field trips, and address classroom needs promptly.
- Ability to manage the physical demands of conducting science experiments, ensuring safety and student participation during hands-on activities.

### **Equal Employment Opportunity**

TPA is an Equal Opportunity Employer. We are committed to providing equal employment opportunities to all qualified individuals, regardless of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or protected veteran status. We ensure that all employment decisions are made without discrimination. For additional information regarding your rights as an applicant, please refer to the U.S. Equal Employment Opportunity Commission poster.

### **Conviction History Background Check**

This position requires fingerprinting and a background check due to the nature of the responsibilities. TPA is an equal opportunity employer and considers applicants with conviction histories. We review all background information within the context of the job requirements. Employment may be contingent upon the successful completion of the background check.

### **Misconduct Disclosure Requirement**

As part of the employment process, the final candidate who accepts a conditional offer of employment will be required to disclose any final administrative or judicial decisions within the past seven years that found them responsible for misconduct. Additionally, candidates must



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disclose if they have received notice of allegations or are currently under investigation in any administrative or disciplinary proceedings involving misconduct, or if they left a previous position while under investigation or after receiving notice of such allegations.

"Misconduct" is defined as any violation of workplace policies or laws, including but not limited to sexual harassment, sexual assault, other forms of harassment, discrimination, dishonesty, or unethical conduct, as defined by the applicant's previous employer. For reference, our institution adheres to policies that address these behaviors.

### **Job Description Disclaimer:**

This job description is intended to provide a general overview of the responsibilities and qualifications for the Middle School Science Teacher role. It is not an exhaustive list of all duties and may change at any time, with or without notice.