

SYLLABUS YEAR-4 Standard-01

Rationale for STEM Education for Future Generations

STEM (Science, Technology, Engineering, and Mathematics) education is essential for preparing future generations to thrive in a rapidly changing and increasingly complex world. The rationale for prioritizing STEM education encompasses several key factors:

1. Driving Economic Growth

STEM fields are critical to the economy. As technology evolves, industries require a workforce skilled in STEM disciplines to innovate and drive growth. By investing in STEM education, we equip students with the necessary skills to participate in high-demand careers, ultimately enhancing economic stability and competitiveness on a global scale.

2. Fostering Innovation and Creativity

STEM education encourages students to think critically and solve real-world problems. By engaging in hands-on projects and collaborative learning, students develop innovative thinking and creativity. These skills are vital for addressing contemporary challenges such as climate change, healthcare, and sustainable energy solutions, enabling future generations to create a better world.

3. Enhancing Critical Thinking and Problem-Solving Skills

STEM education cultivates analytical thinking and the ability to approach problems methodically. Students learn to formulate hypotheses, conduct experiments, and analyze data. These critical thinking skills are not only applicable in STEM fields but also essential in everyday life, empowering individuals to make informed decisions and tackle complex issues.

4. Promoting Equity and Inclusion

Investing in STEM education helps bridge the gap in underrepresented communities. By providing access to quality STEM programs, we can inspire diverse talent and perspectives, ensuring that all students, regardless of background, have opportunities to succeed in these fields. This inclusivity fosters a more equitable society and enhances innovation by incorporating varied viewpoints.

5. Preparing for the Future Job Market

The job market is increasingly shifting toward technology and STEM-related fields. Many of the fastest-growing occupations require skills in data analysis, engineering, and computer science. By emphasizing STEM education, we prepare

students for future careers that will dominate the job landscape, equipping them with the skills needed to adapt and excel in an evolving workforce.

6. Encouraging Lifelong Learning

STEM education instills a passion for inquiry and learning. As technology and scientific understanding progress, the ability to learn and adapt becomes crucial. Students engaged in STEM are more likely to embrace continuous learning, seeking new knowledge and skills throughout their lives, which is essential in a world characterized by rapid change.

7. Contributing to Global Challenges

Many global challenges, such as health crises, environmental issues, and energy shortages, require scientific and technological solutions. STEM education empowers future generations to engage with these issues, fostering a sense of responsibility and enabling them to contribute positively to society. By equipping students with the tools to tackle such challenges, we can create a more sustainable and resilient future.

8. Building Collaboration and Communication Skills

STEM education often involves teamwork and collaboration, simulating realworld work environments. Through group projects and discussions, students learn to communicate effectively, share ideas, and work collaboratively toward common goals. These skills are invaluable in any career and foster a sense of community and shared responsibility.

Conclusion

In conclusion, STEM education is vital for shaping future generations capable of navigating an increasingly complex world. By fostering innovation, critical thinking, and problem-solving skills, we prepare students to contribute to economic growth, address global challenges, and thrive in a technology-driven society. Investing in STEM education today ensures that future leaders and thinkers are well-equipped to create a brighter, more sustainable future for all.

Why NOT the Traditional Curriculum BUT STEM Education: A Pathway to a Brighter Future for Our Children

As parents, we all want the best for our children. We envision a future where they are not only successful in their careers but also equipped with the skills and knowledge to navigate a rapidly changing world. In today's fast-paced, technology-driven society, it is essential to rethink how

we approach education. Traditional curricula, while having served their purpose, often fall short in preparing our children for the challenges they will face. This is where STEM education comes in—a revolutionary approach that emphasizes Science, Technology, Engineering, and Mathematics. Here's why you should consider advocating for STEM education over the traditional curriculum.

1. Fostering Critical Thinking and Problem-Solving Skills

Traditional education often emphasizes rote memorization and standardized testing, which can stifle creativity and critical thinking. In contrast, STEM education encourages children to engage in hands-on learning experiences that challenge them to think critically and solve realworld problems. By exploring complex concepts through experimentation and collaboration, children develop the ability to analyze situations, make informed decisions, and tackle challenges creatively.

2. Cultivating a Love for Learning

One of the biggest drawbacks of a traditional curriculum is that it can sometimes make learning feel like a chore. The rigid structure often leaves little room for exploration and curiosity. STEM education, however, transforms learning into an exciting adventure. With interactive projects, engaging experiments, and collaborative activities, children develop a passion for learning that lasts a lifetime. When they see the real-world applications of what they are studying, their intrinsic motivation to learn grows.

3. Preparing for Future Careers

The job market is evolving, with many of the fastest-growing careers requiring strong STEM skills. From engineers and data scientists to healthcare professionals and environmental specialists, the demand for STEM graduates is on the rise. By providing children with a solid foundation in STEM education, we equip them with the necessary skills to thrive in their future careers. This prepares them not just for jobs, but for meaningful careers that can positively impact the world.

4. Encouraging Collaboration and Teamwork

In the traditional classroom, students often work in isolation, competing against one another rather than collaborating. STEM education, on the other hand, emphasizes teamwork and collaboration. Students learn to communicate effectively, share ideas, and work together to solve problems. These interpersonal skills are crucial in today's interconnected world and are highly valued by employers.

5. Building Resilience and Adaptability

STEM education fosters an environment where failure is viewed as a stepping stone to success. When children engage in experiments, they learn that not every attempt will yield the desired result. This builds resilience and teaches them to adapt their strategies, learn from mistakes, and persevere in the face of challenges. These are essential life skills that will serve them well in any endeavor.

6. Integrating Real-World Applications

One of the key benefits of STEM education is its focus on real-world applications. Children see firsthand how what they learn in the classroom applies to their everyday lives. Whether it's understanding the science behind climate change, using technology to solve community problems, or engineering solutions for everyday challenges, STEM education makes learning relevant and meaningful.

7. Encouraging Diversity in STEM Fields

STEM fields have historically lacked diversity, with many underrepresented groups facing barriers to entry. By introducing STEM education at an early age, we can inspire a diverse range of students to explore these fields. It's crucial that all children see themselves as potential scientists, engineers, and innovators. Encouraging diversity not only enriches the learning environment but also drives innovation and creativity in STEM fields.

Conclusion

As we consider the future of our children, it is essential to advocate for educational approaches that prepare them for success in a rapidly changing world. STEM education offers a dynamic and engaging alternative to traditional curricula, equipping our children with the critical skills, knowledge, and mindset they need to thrive. By embracing STEM education, we are not just preparing our children for future careers; we are nurturing the next generation of thinkers, problem-solvers, and leaders.

Let's work together to create an educational environment that inspires our children, ignites their curiosity, and empowers them to make a difference in the world. The future is bright, and with STEM education, we can ensure our children are ready to shine in it!

STEM Education Curriculum Overview for TESOL Elementary School

Introduction:

At TESOL Elementary School, the STEM Education Curriculum is designed to foster curiosity, critical thinking, and hands-on learning. Each year, students will be introduced to foundational concepts in Science, Technology, Engineering, Mathematics, Ethics, and Phonics. Through the Montessori Method, students will learn in a child-centered environment that encourages self-discovery. The curriculum emphasizes "learning by teaching," where students not only absorb knowledge but also share what they've learned. The goal is to nurture a love for exploration and to prepare children with skills for the future. Parents play an essential role in supporting this journey, working closely with their children to reinforce concepts learned in school.

Year 04: Lower Elementary Level Students (Age 6-7)

Introduction:

In Year 04, students at TESOL Elementary School transition into the Lower Elementary

level, where they begin to develop more independent learning habits and explore increasingly complex concepts. The curriculum continues to emphasize inquiry-based and hands-on learning while introducing structured academics in subjects like mathematics, science, and literacy. This year, students will enhance their critical thinking skills and engage with STEM-focused lessons, while foreign languages and social studies will allow them to gain a broader cultural perspective. Social skills, teamwork, and ethical values will be emphasized to foster personal development and empathy.

Foundation Science

Theme: Exploring Materials and Energy

- Objectives:
 - 1. Understand the properties of materials (solid, liquid, gas).
 - 2. Investigate how different materials change with heat or cold.
 - 3. Learn about energy and how it is used in everyday life.
 - 4. Explore renewable energy sources and the importance of conserving energy.
 - 5. Foster curiosity and experimentation through science projects and real-world observations.

Activities:

- 1. Material Sorting: Sort materials into categories: solid, liquid, and gas.
- 2. **Heat and Cold Experiments:** Observe how heat affects materials (melting ice, boiling water).
- 3. Energy Hunt: Explore the school environment to find examples of energy use (lights, heaters, machines).
- 4. **Renewable Energy Project:** Create a simple model of a windmill or solar oven with parent assistance.
- 5. Group Science Fair: Students present their projects on energy sources and conservation.

Evaluation:

- Teacher observation during experiments and group projects.
- Written assessments (material sorting and energy definitions).
- Parent feedback on home projects.
- Group project evaluations for the science fair.
- Self-assessment through science journals.

Motivation:

"Materials and energy are all around us—by learning how they work, we can create new ideas for saving energy and protecting our planet!"

Foundation Literacy

Theme: Developing Reading and Writing Fluency

- Objectives:
 - 1. Improve reading fluency through decoding and comprehension strategies.
 - 2. Enhance vocabulary by exploring new words in context.
 - 3. Practice writing complete sentences and short paragraphs.
 - 4. Develop storytelling skills through guided writing exercises.
 - 5. Foster a love for reading by exploring different genres of books.

Activities:

- 1. **Daily Reading Practice:** Students read aloud in pairs or to the teacher to improve fluency.
- 2. Vocabulary Building: Use picture cards and context to learn 5 new words each week.
- 3. Story Creation: Write short stories using a set of vocabulary words and illustrations.
- 4. **Book Club:** Read age-appropriate books and discuss characters, plot, and setting in class.
- 5. **Parent-Assisted Writing:** Parents help children write a short letter or journal entry each week.

Evaluation:

- Teacher observation during reading and writing exercises.
- Weekly vocabulary quizzes.
- Peer feedback on storytelling projects.
- Parent feedback on writing activities.
- Writing assessment (complete sentences and paragraphs).

Motivation:

"Every new word and story you learn is a key to unlocking more adventures in reading and writing. Your imagination can take you anywhere!"

Foundation Mathematics

Theme: Exploring Numbers and Operations

• Objectives:

- 1. Understand place value and the number system up to 1,000.
- 2. Practice addition and subtraction with two- and three-digit numbers.
- 3. Introduction to multiplication and division using visual aids.
- 4. Develop problem-solving skills through real-life math scenarios.
- 5. Explore shapes, patterns, and symmetry through hands-on activities.

Activities:

1. Place Value Blocks: Use blocks or counters to represent hundreds, tens, and ones.

- 2. Addition and Subtraction Races: Solve two- and three-digit problems in a timed challenge.
- 3. **Multiplication with Objects:** Group objects to visualize multiplication (e.g., 3 groups of 4).
- 4. **Math Word Problems:** Solve word problems involving real-life scenarios (shopping, cooking).
- 5. Shape Patterns: Create symmetrical designs using pattern blocks and colored shapes.

Evaluation:

- Written assessments (addition, subtraction, and multiplication).
- Teacher observation during math games and activities.
- Parent feedback on home-based math practice.
- Group problem-solving challenges in class.
- Self-assessment in a math journal (reflecting on learning progress).

Motivation:

"Math is everywhere! From counting to cooking, the more you learn, the more you can solve everyday puzzles and challenges."

Foundation Technology, IT, and Vocational Skills

Theme: Exploring Technology and Simple Coding

• Objectives:

- 1. Develop an understanding of how technology improves daily life.
- 2. Learn basic coding concepts (sequences, loops, and simple algorithms).
- 3. Explore different vocational skills and how they use technology.
- 4. Engage in creativity and critical thinking through technology-based projects.
- 5. Foster collaboration and teamwork through group technology activities.

Activities:

- 1. **Introduction to Coding:** Use a simple coding platform like Scratch to create stories or games.
- 2. **Technology in Daily Life:** Explore how different technologies are used at home and school (e.g., computers, washing machines).
- 3. Vocational Skills Exploration: Learn about various professions (e.g., a carpenter or doctor) and how they use technology.
- 4. **Parent-Assisted Technology Project:** Parents help children complete a project related to technology in the home (e.g., fixing a small appliance or creating a digital photo album).
- 5. **Group Coding Challenges:** Students work together to solve simple coding puzzles or create a group animation.

Evaluation:

- Teacher observation during coding and technology activities.
- Peer feedback on group projects.
- Parent feedback on home technology projects.
- Written reflection on how technology helps in daily life.
- Self-assessment: students reflect on their teamwork and problem-solving in coding.

Motivation:

"Technology helps us solve problems, connect with others, and create new things. By learning how it works, you can build anything from games to gadgets!"

Foundation Engineering

Theme: Building Simple Machines and Structures

- Objectives:
 - 1. Explore how simple machines work (levers, pulleys, gears).
 - 2. Learn the basic principles of engineering through construction projects.
 - 3. Develop problem-solving and teamwork skills.
 - 4. Foster creativity by designing and building projects.
 - 5. Test and improve designs through trial and error.

Activities:

- 1. **Simple Machine Exploration:** Explore how levers, pulleys, and gears work through hands-on activities.
- 2. Build a Bridge: Use materials like popsicle sticks to design and build a simple bridge.
- 3. **Parent-Assisted Machine Project:** Parents help children build a simple machine at home (e.g., a pulley or lever system).
- 4. **Design a Roller Coaster:** Use cardboard tubes and marbles to create a simple roller coaster that demonstrates gravity and motion.
- 5. Classroom Engineering Challenge: Students work in teams to design and build the strongest structure using everyday materials.

Evaluation:

- Teacher observation during construction activities and engineering challenges.
- Peer collaboration and feedback on group projects.
- Parent feedback on home-based machine projects.
- Written reflection on how simple machines work.
- Group project evaluations for classroom challenges.

Motivation:

"Engineers use their creativity and skills to build everything from bridges to buildings. You can be an engineer too—by solving problems and designing new creations!"

Foundation Social Studies

Theme: Communities and Cultures

- Objectives:
 - 1. Learn about different types of communities (urban, rural, and suburban).
 - 2. Explore cultural traditions and holidays from around the world.
 - 3. Understand the roles people play in a community (e.g., teacher, doctor, police officer).
 - 4. Practice empathy and social responsibility through group activities.
 - 5. Engage with simple geography (maps, landforms, and locations).

Activities:

- 1. **Community Helpers Role-Play:** Students take on the roles of different community helpers and act out their duties.
- 2. **Cultural Celebrations:** Explore how different cultures celebrate important holidays (e.g., Eid, Chinese New Year).
- 3. **Community Map Creation:** Design a map of a local community, including important buildings (school, hospital, park).
- 4. **Parent-Assisted Cultural Exploration:** Parents help children explore a cultural tradition at home, sharing photos or objects in class.
- 5. **Geography Puzzle:** Use a puzzle to explore landforms and locations (mountains, rivers, cities).

Evaluation:

- Teacher observation during role-play and geography activities.
- Peer feedback on group projects.
- Parent feedback on home-based cultural explorations.
- Written reflection on community roles and geography.
- Group project evaluation for map design.

Motivation:

"By learning about different communities and cultures, we understand how people live, work, and celebrate all around the world!"

Foundation Ethics & Religion

Theme: Building Moral Character and Understanding Diversity

- Objectives:
 - 1. Explore the importance of moral values and ethical decision-making.
 - 2. Learn about different religions and their teachings.
 - 3. Discuss the importance of kindness, respect, and empathy in interactions.
 - 4. Engage in community discussions about diversity and inclusion.
 - 5. Develop critical thinking through analyzing moral dilemmas.

Activities:

- 1. **Moral Dilemma Discussions:** Discuss age-appropriate moral dilemmas and the values that guide decisions.
- 2. **Religion Exploration Day:** Research and present on various world religions and their core beliefs.
- 3. **Kindness Campaign:** Create a classroom campaign promoting kindness and respect (posters, videos).
- 4. Cultural Exchange: Share personal or family cultural traditions and values in class.
- 5. **Reflection Journals:** Write about experiences and lessons learned regarding ethics and religion.

Evaluation:

- Teacher observation during discussions and presentations.
- Peer feedback on kindness campaign initiatives.
- Self-assessment through reflection journals on moral lessons.
- Group project evaluations for religion presentations.
- Parent feedback on discussions at home.

Motivation:

"By understanding different beliefs and values, we can learn to live together harmoniously and with respect for one another!"

Foreign Languages: Spanish & French

Theme: Proficiency and Cultural Connections

- Objectives:
 - 1. Expand vocabulary and grammar knowledge in Spanish and French.
 - 2. Improve conversational skills through role-playing and dialogues.
 - 3. Explore cultural connections through festivals, traditions, and food.
 - 4. Develop writing skills through short compositions in both languages.
 - 5. Understand the importance of multilingualism in today's global society.

Activities:

- 1. **Vocabulary Building Games:** Play interactive games to learn new words and phrases.
- 2. Conversational Role-Play: Practice dialogues in pairs, focusing on daily interactions.
- 3. **Cultural Festival Day:** Celebrate a Spanish or French holiday with food, music, and traditions.
- Writing Projects: Compose short stories or letters in Spanish and French.
 5. Parent Participation: Encourage parents to share their experiences with the languages and cultures.

Evaluation:

• Oral assessments on vocabulary and conversational skills.

- Teacher observation during role-playing activities.
- Peer feedback on writing projects.
- Parent feedback on home language practice.
- Self-assessment through language journals.

Motivation:

"Language is a bridge to new cultures and friendships. Let's explore together and see how language connects us!"

Conclusion:

The Year 05 syllabus focuses on fostering a deeper understanding of core subjects while promoting critical thinking, creativity, and global awareness. Students will engage in collaborative projects, explore environmental responsibility, and develop strong communication skills through language learning and social studies. The emphasis on ethics and moral character prepares students to be empathetic and responsible citizens in an increasingly interconnected world.

Year 04: Grade 1 Students

Foundation Science

- 1. Weather Report Project: Create a daily weather report.
- 2. Plant Growth Experiment: Grow beans and track growth in a journal.
- 3. Animal Habitats Diorama: Build a 3D model of an animal habitat.
- 4. Simple Machines in Action: Identify and demonstrate simple machines at home.
- 5. Water Cycle Experiment: Create a mini water cycle model.
- 6. Recycling Project: Collect recyclable items and create an art piece.
- 7. Shadow and Light Exploration: Use flashlights to observe shadows.
- 8. Nature Scavenger Hunt: Find and identify items in nature.
- 9. Building Birdhouses: Construct and decorate birdhouses.
- 10. Healthy Food Poster: Create a poster showing healthy food choices.
- 11. Magnifying Glass Exploration: Use magnifying glasses to examine small objects.
- 12. Simple Chemical Reactions: Perform vinegar and baking soda experiments.
- 13. Solar System Model: Build a model of the solar system.
- 14. Plant Parts Investigation: Dissect flowers to learn about plant parts.
- 15. Explore Rocks and Minerals: Collect and classify different rocks.
- 16. Animal Adaptation Presentations: Research and present on animal adaptations.
- 17. Life Cycle Charts: Create life cycle charts for various animals.
- 18. Sound Exploration: Create different sounds using household items.
- 19. Magnetism Exploration: Conduct experiments to see what items are magnetic.
- 20. Creating a Class Garden: Start and maintain a class garden.
- 21. Exploring Force and Motion: Conduct simple experiments with ramps.
- 22. Food Chain Diagrams: Create diagrams of local food chains.
- 23. Building a Model Volcano: Create and erupt a volcano model.
- 24. Earth Day Projects: Participate in Earth Day activities.
- 25. Simple Electronics: Use basic circuits to light up a bulb.

Foundation Phonics for Grade 1 Students

1. **Phonics Bingo**: Play bingo using phonetic sounds.

- 2. Word Family Trees: Create trees showing different word families.
- 3. Rhyming Dictionary: Create a class rhyming dictionary.
- 4. Sound Story Creation: Write and illustrate a story using phonics sounds.
- 5. **Phonics Board Games**: Make board games focusing on phonics.
- 6. Interactive Phonics Apps: Use apps to practice phonics skills.
- 7. Phonics Charades: Act out words that start with specific phonics sounds.
- 8. Phonics Poetry: Write simple poems using phonetic patterns.
- 9. Create Phonics Songs: Compose songs that reinforce phonics skills.
- 10. Phonics Puppet Show: Perform a puppet show using phonics words.
- 11. Word Sorting Games: Sort words based on phonetic sounds.
- 12. Phonics Relay Race: Race to find items starting with specific sounds.
- 13. Creating Phonics Flashcards: Make flashcards for phonics practice.
- 14. Sound Identification Games: Play games identifying sounds in words.
- 15. Phonics Art Projects: Create art using phonics concepts.
- 16. Interactive Story Reading: Read stories emphasizing phonics sounds.
- 17. Phonics Show and Tell: Present items that begin with certain sounds.
- 18. Phonics Scrapbook: Create a scrapbook featuring phonics words.
- 19. Phonics Escape Room: Solve phonics puzzles to "escape" the room.
- 20. Phonics Word Hunt: Find and list words around the classroom.
- 21. Sound Patterns with Instruments: Create sound patterns using instruments.
- 22. Phonics Flip Books: Make flip books to illustrate phonics concepts.
- 23. Phonics Detective: Go on a "detective" mission to find phonics clues.
- 24. Interactive Phonics Charts: Create charts showing phonetic sounds.
- 25. Phonics Reviews with Games: Use games to review phonics concepts.

Foundation Technology, IT and Vocational Teaching for Grade 1 Students

- 1. Basic Coding with Apps: Introduce coding through educational apps.
- 2. Digital Story Creation: Create and present a digital story.
- 3. Virtual Field Trips: Go on virtual field trips using online resources.
- 4. Simple Video Production: Create a class video on a topic of choice.
- 5. Using Google Earth: Explore different places around the world.
- 6. Introduction to Spreadsheets: Use basic spreadsheets for data.
- 7. Interactive Presentations: Create interactive presentations using apps.
- 8. Photo Journals: Document class activities through photography.
- 9. Online Safety Discussion: Discuss online safety rules and practices.
- 10. Learning about Robots: Explore robotics through simple kits.
- 11. Creating Digital Art: Use apps to create digital art pieces.
- 12. Simple Website Creation: Build a basic class website.
- 13. Exploring Animation: Create simple animations using software.
- 14. Hands-On Tech Exploration: Explore different tech tools in the classroom.
- 15. Class Blog: Start a blog to share class projects and news.
- 16. Using 3D Printing: Introduce 3D printing concepts through design.
- 17. Online Collaboration: Work on a collaborative project using online tools.
- 18. Podcast Creation: Record a simple podcast episode as a class.
- 19. Digital Citizenship Activities: Discuss the importance of being a good digital citizen.
- 20. App Reviews: Research and present on educational apps.
- 21. Create E-Cards: Design and send digital greeting cards.
- 22. Explore Video Conferencing: Learn how to use video conferencing tools.
- 23. Basic Graphic Design: Create posters using graphic design tools.
- 24. Exploring Music Creation Apps: Use apps to compose simple music.
- 25. Virtual Science Experiments: Participate in virtual experiments online.

Foundation Engineering for Grade 1 Students

- 1. Building Towers with Blocks: Create the tallest tower possible.
- 2. **Kite Designing**: Design and build kites to fly.
- 3. Simple Boat Challenge: Create boats that float using various materials.
- 4. Constructing Bridges: Build bridges with different materials.
- 5. Egg Drop Experiment: Design a device to protect an egg during a drop.
- 6. Paper Airplane Contest: Design and test different paper airplane models.
- 7. Building with Recyclables: Use recycled materials to create structures.
- 8. Explore Building Materials: Discuss and test various building materials.
- 9. Create a Rube Goldberg Machine: Design a simple Rube Goldberg machine.
- 10. Wind-Powered Cars: Create cars powered by wind using sails.
- 11. Marshmallow and Toothpick Structures: Build structures with marshmallows and toothpicks.
- 12. Balloon Rockets: Create rockets powered by balloon air.
- 13. Design a Park: Plan and design a playground layout.
- 14. Simple Circuit Projects: Create simple circuits using batteries and bulbs.
- 15. Water Rocket Launch: Build and launch a water rocket.
- 16. Explore Architecture: Research famous buildings and design models.
- 17. Building an Obstacle Course: Create and navigate an obstacle course.
- 18. Design a Garden Layout: Plan and design a garden.
- 19. Create a Simple Robot: Use kits to build simple robots.
- 20. Explore Mechanical Toys: Analyze and create mechanical toys.
- 21. Cardboard Box Creations: Use cardboard boxes to build structures.
- 22. Build a Simple Catapult: Construct a catapult and test its distance.
- 23. Explore Forces with Balloons: Use balloons to demonstrate push and pull.
- 24. Paper Bridge Challenge: Build a bridge using only paper and test its strength.
- 25. Animal Shelter Design: Design and model a shelter for an animal.

Foundation Mathematics for Grade 1 Students

- 1. Math Centers: Set up various math centers for hands-on practice.
- 2. Counting Games with Manipulatives: Use manipulatives to practice counting.
- 3. Shape Hunt: Identify and classify shapes around the school.
- 4. Graphing Survey Results: Conduct a survey and create graphs.
- 5. Measurement Activities: Measure classroom items using rulers.
- 6. Skip Counting Games: Practice skip counting with fun activities.
- 7. Math Story Problems: Create and solve story-based math problems.
- 8. Telling Time Activities: Practice telling time with clocks.
- 9. Money Sorting: Sort and count play money.
- 10. Pattern Creation: Make and extend patterns using objects.
- 11. Addition and Subtraction Games: Play games reinforcing addition and subtraction.
- 12. Math Bingo: Play bingo using math facts.
- 13. Simple Fractions with Food: Use food to introduce basic fractions.
- 14. Measurement Scavenger Hunt: Find and measure objects around the classroom.
- 15. Number Line Activities: Use a number line to solve math problems.
- 16. Math Journals: Keep a math journal documenting learning.
- 17. Explore Graphing: Use beans to create graphs based on class data.
- 18. Math Relay Races: Solve math problems as part of a relay race.
- 19. Create a Math Storybook: Write and illustrate a storybook focused on math.
- 20. Board Games for Math Skills: Play board games that reinforce math concepts.
- 21. Estimate and Measure: Estimate and then measure the length of items.

- 22. Geometry Scavenger Hunt: Find and classify geometric shapes.
- 23. Story Problems Creation: Write and solve math story problems.
- 24. Math Puzzles: Solve math puzzles for critical thinking.
- 25. Math Art Projects: Create art using math concepts like symmetry and shapes.

Foundation Ethics & Religion for Grade 1 Students

- 1. Storytelling of Moral Tales: Share moral stories from various cultures.
- 2. Acts of Kindness Jar: Create a jar to collect acts of kindness.
- 3. Cultural Festivals Presentation: Present on different cultural festivals.
- 4. Respectful Communication Role Play: Role play scenarios demonstrating respect.
- 5. Gratitude Journal: Maintain a journal to express gratitude.
- 6. Values Discussion: Discuss different values and their importance.
- 7. Create a Kindness Tree: Build a tree with leaves representing kind acts.
- 8. **Diversity Collage**: Create a collage representing diversity.
- 9. Explore Religious Symbols: Research and present on religious symbols.
- 10. Community Service Project: Engage in a small community service project.
- 11. Discussion on Fairness: Discuss what fairness means in different scenarios.
- 12. Peaceful Conflict Resolution: Role-play conflict resolution strategies.
- 13. Explore Different Beliefs: Share presentations on different beliefs.
- 14. Moral Dilemma Discussions: Discuss moral dilemmas and possible resolutions.
- 15. Create a Family Values Chart: Chart family values and discuss their importance.
- 16. Explore Heroes and Role Models: Research and present on local heroes.
- 17. Discussion on Friendship: Talk about what makes a good friend.
- 18. Ethical Dilemmas Role Play: Role-play different ethical scenarios.
- 19. Community Helpers Exploration: Research and discuss community helpers.
- 20. Create an 'I Believe' Wall: Display students' beliefs and values.
- 21. Moral Lessons from History: Learn about historical figures and their values.
- 22. Explore the Concept of Sharing: Discuss the importance of sharing.
- 23. World Religions Exploration: Introduce basic concepts from various religions.
- 24. Diversity Story Time: Read stories that reflect diverse cultures and values.
- 25. Celebrate Cultural Days: Participate in celebrations of different cultures.