

Description:
High-Quality Mathematics Instruction:
What Teachers Should Know

Notes: _____



Description:
Over the last five years, the principals
and teachers in the Lincoln School
district

Notes: _____



Description:
focused their attention and resources
on improving reading instruction.

Notes: _____



Description:
The result of those efforts was an
increase in student reading scores.

Notes: _____



Description:
Given this success, the administrative
personnel at the district level now
wish to do the same for their students'
mathematics performance.

Notes: _____



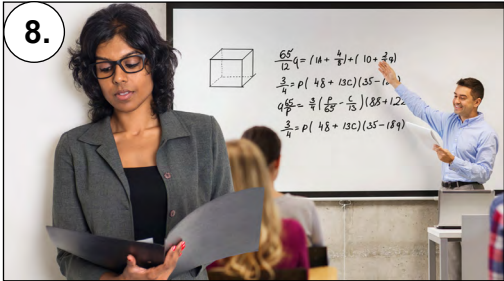
Description:
To begin, the district superintendent hires a consultant

Notes: _____



Description:
to observe and to informally interview a representative sample of kindergarten through twelfth-grade teachers.

Notes: _____



Description:
The consultant collects information about the practices and activities the teachers implement during mathematics instruction.

Notes: _____



Description:
She also reviews the current curricula for each grade level.

Notes: _____



Description:
Finally, the consultant issues a report of her findings:

Notes: _____



Description:
The good news is that the curriculum aligns with their state's standards.

Notes: _____



Description:
However, many school personnel are not using all of the included materials

Notes: _____



Description:
or are not able to cover all the skills outlined in the scope and sequence of each grade level's curriculum.

Notes: _____



Description:
Additionally, some school personnel are not teaching the skills correctly

Notes: _____



Description:
or aligning their instruction with the curriculum materials.

Notes: _____



Description:
More, most are emphasizing teaching computational skills

Notes: _____



Description:
over real-world problem-solving skills.

Notes: _____



Description:
Because of this, the students do not develop a strong understanding of mathematics concepts. They also struggle to make connections between them.

Notes: _____



Description:
As a result, the consultant has concluded that a number of issues have arisen, for instance:

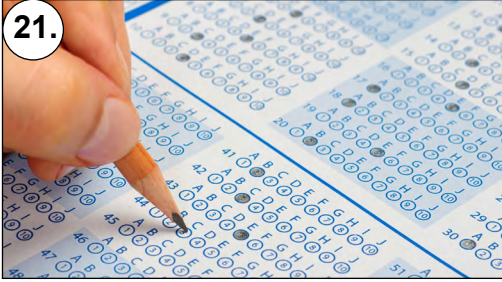
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Description:
Upper-level teachers must reteach topics covered in the earlier grades

Notes: _____

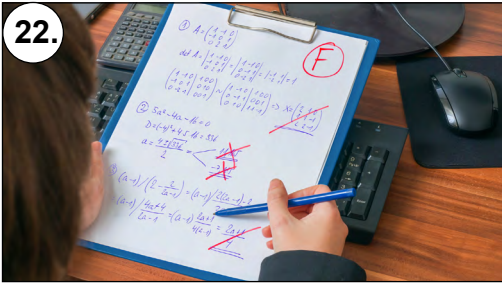
21.

**Description:**

A majority of students across grade levels perform poorly on high-stakes standardized tests.

Notes: _____

22.

**Description:**

A large number of students have difficulty meeting high school graduation requirements related to mathematics

Notes: _____

23.

**Description:**

A disproportionate number of students have to take remedial mathematics courses in college.

Notes: _____

24.

High-Quality
Mathematics
Instruction

**Description:**

To address these issues, the consultant recommends that the teachers implement high-quality mathematics instruction.

Notes: _____

25.

**Description:**

By doing so, school personnel should see an improvement in student performance.

Notes: _____



Description:

The district personnel reply that—as far as they knew—they were already using high-quality mathematics instruction and had been all along.

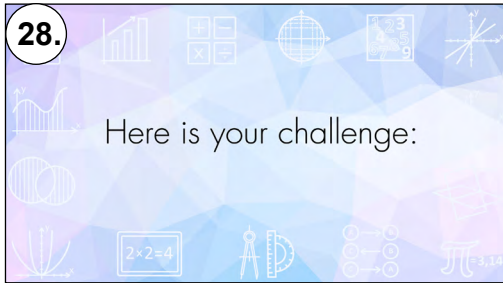
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Description:

Given this revelation, they are unsure of what they need to do differently.

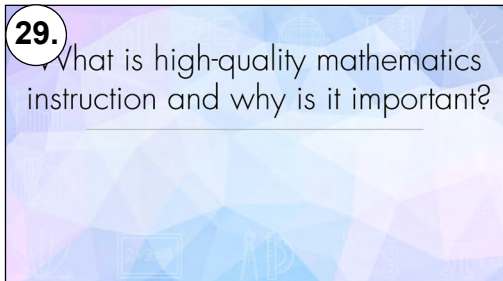
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Description:

Here is your Challenge:

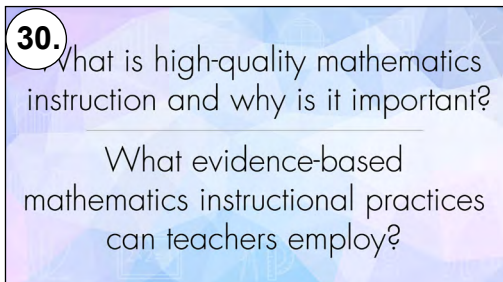
Notes: _____



Description:

What is high-quality mathematics instruction and why is it important?

Notes: _____



Description:

What evidence-based mathematics instructional practices can teachers employ?

Notes: _____
