Name: _____ Date: _____

Tightening a Kettle Drum to Change Its Note

Circle group

Most drums go thump. A kettle drum can play a high note or a low note. A good player can use it to play a tune. A kettle drum is also called a timpani. It is a round copper bowl. A skin is stretched over the top.

How does the player change the note? She changes how tight the skin is. A tight skin shakes fast when hit. Fast shaking makes a high sound. A loose skin shakes slow. Slow shaking makes a low sound. A guitar string works the same way. Pull it tight and the note goes up.

A pedal sits by the drum. When the player moves her foot, rods make the skin tighter or looser. An orchestra may have drums of different sizes. A big bowl makes a deep sound. A small bowl makes a high sound.

Before a concert, the player taps each drum and listens. She adjusts the pedal until the note is right.

Questions

1. What is another name for a kettle drum?

_____

_____

2. What is a timpani made of?

_____

_____

3. What sound does a tight skin make?

_____

_____

4. What does the pedal do?

_____

_____

5. Why does the player tap and listen before a concert?

_____

_____

6. Which bowl gives a deeper sound, a big one or a small one?

_____

_____

Words to know

timpani: large drums with bowl shapes that can play different notes
copper: a reddish-brown metal
orchestra: a large group of musicians who play together

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Tightening a Kettle Drum to Change Its Note

Triangle group

Most drums make a thump with no real note to it. A kettle drum is different. It can play a note high or low, and a skilled player can use it to follow a tune. The kettle drum is also called a timpani. The word describes a round copper bowl with a skin stretched tightly across the top.

How does a player change the note? The answer is tightness. A tight skin shakes quickly when it is hit, and quick shaking makes a high sound. A looser skin shakes more slowly, and slow shaking makes a lower sound. It is the same idea as a guitar string. Pull a string tighter, and its note goes up.

A timpani player has a handy tool for this. Beside the drum is a pedal. When the player moves her foot, a set of rods pulls the skin tighter or lets it go looser. In an orchestra, a player may have several drums of different sizes. A larger bowl gives a deeper sound, and a smaller bowl gives a higher one.

Before a concert, the player taps each drum and listens closely. Then she adjusts the pedal until the note is just right. Even during the music, she may lean over and listen to be sure.

Questions

1. What is a kettle drum also called?

_____

_____

2. What is a timpani made of?

_____

_____

3. What kind of sound does a tight skin make?

_____

_____

4. What does the pedal do?

_____

_____

5. Why does a player tap and listen before a concert?

_____

_____

6. Which would give a deeper sound, a large bowl or a small one?

_____

_____

Words to know

timpani: large drums with bowl shapes that can play different notes
copper: a reddish-brown metal
tightness: how firmly something is pulled
orchestra: a large group of musicians who play together

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

Tightening a Kettle Drum to Change Its Note

Square group

Most drums produce a thump that has no true musical note to it. A kettle drum is quite different, since it can sound a high or a low note, and a skilled player can use several of them to follow a tune. The kettle drum is also known as a timpani, a name that describes a round copper bowl with a skin stretched tightly across its opening.

How does a player change the note? The answer lies in tightness. A taut skin vibrates rapidly when struck, and rapid vibration creates a high sound. A looser skin vibrates more slowly, and slow vibration creates a lower sound. The principle is the same as with a guitar string, because pulling a string tighter raises its note.

A timpani player has a convenient tool for this task. Beside the drum sits a pedal, and when the player shifts her foot, a set of rods pulls the skin tighter or lets it relax. In an orchestra, a musician may care for several drums of various sizes. A larger bowl yields a deeper sound, whereas a smaller bowl yields a higher one.

Before a concert, the player taps each drum and listens closely, then adjusts the pedal until the note is exactly right. Even during the music, she may lean over to listen and make certain.

Questions

1. By what other name is a kettle drum known?

_____

_____

2. How is a timpani built?

_____

_____

3. What kind of sound does a taut skin create?

_____

_____

4. What is the purpose of the pedal?

_____

_____

5. Why does the player tap and listen before a concert?

_____

_____

6. Which would yield a deeper sound, a large bowl or a small one?

_____

_____

Words to know

timpani: large drums with bowl shapes that can play different notes
copper: a reddish-brown metal
tightness: how firmly something is pulled
orchestra: a large group of musicians who play together

Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

For the teacher: Tightening a Kettle Drum to Change Its Note

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

Circle: Tightening a Kettle Drum to Change Its Note

Easier · 160 words · Flesch-Kincaid grade 1

1. A timpani.
2. A copper bowl with a skin over the top.
3. A high sound.
4. It makes the skin tighter or looser.
5. She checks the note and adjusts the pedal.
6. A big one.

Triangle: Tightening a Kettle Drum to Change Its Note

This passage · 212 words · Flesch-Kincaid grade 3.6

1. A timpani.
2. A round copper bowl with a skin stretched across the top.
3. A high sound.
4. It pulls the skin tighter or lets it go looser.
5. She is checking the note and adjusting the pedal until it is right.
6. A large one.

Square: Tightening a Kettle Drum to Change Its Note

Harder · 221 words · Flesch-Kincaid grade 6.6

1. A timpani.
2. A round copper bowl with a skin stretched tightly across the opening.
3. A high sound.
4. It pulls the skin tighter or lets it relax.
5. She is checking the note and adjusting the pedal until it is right.
6. A large one.