

## **Glass Harp Music/ Instructional Plan:**

1. Artist introduces himself and instrument: 7 minutes
  - a) Plays opening musical selection – simple “Ode to Joy” theme.
  - b) Description of instrument, origins of glassmaking, beginnings of glass music in 18<sup>th</sup> century Europe. Quick review of how music is played using *friction* and that the glasses are *vibrating*.
  - c) Classical piece – “St Anthony’s Chorale” by Haydn.
  - d) Possible additional piece, based on audience (e.g. “Twinkle Twinkle” for younger kids, or another classical, or jazz, or modern selection)
  
2. Making music with everyday things: 9 minutes
  - a) Recap that a glass is for drinking, but not only drinking. Demonstration of soup bowls used in classical Indian music. Demonstration of sound produced from blowing on top of a bottle, and change of pitch by adding water. Demonstration of six bottles filled with water to play “Twinkle Twinkle” or “Jingle Bells.” Demonstration of sound effect with plastic pancake mix containers.
  - b) Two musical selections, “Under the Sea” from the movie *Little Mermaid*, and “Good Humor Theme—“ an ice cream truck tune.
  
3. Participation, plus another song: 7 minutes
  - a) Student or teacher is invited up for quick instruction on how to play a glass using friction, emphasizing clean hands, and wet finger. Then audience member joins Brien in a duet with Ode to Joy theme.
  - b) Musical selection, possibly a Jazz tune or Spanish Villancico
  
4. Mechanics of Sound: 10 minutes
  - a) *Vibration* -- examples of spring vibration in daily life resulting in sound, introduction of a wiggling wooden stick (a ‘spring’) to illustrate how speed of vibration changes with a change in weight and size.
  - b) *Tuning* – the soup bowls introduced earlier are filled with different amounts of water to play “Jingle Bells.”
  - c) Second ice cream truck song, “Mr Softee Theme.”

## **Glass Harp Music/ Instructional Plan, page two:**

5. Music from friction: 7 minutes

- a) Overview of friction as a form of rubbing, as in Crickets generating sound, or squeaky shoes on gym floor.
- b) A bow is introduced as part of playing violin, a friction instrument. The bow is shown to microscopically have many bumps and sticky areas on the hair, even more with addition of rosin. A student assists Brien for a demonstration of how friction works with a bow and violin, and how it is the same with a finger and a glass.  
(catch/release/catch/release/etc)
- c) Introduction of musical saw as friction instrument, based on the same physics above, and Brien demonstrates by playing a song request from audience, with musical saw.

6. The Armonica: 5 minutes

- a) Quick account of Ben Franklin's time in Paris as ambassador, and how he learned about Glass Harp, leading to his invention of his *armonica*.
- b) Assembly of small armonica replica on stage, pointing out differences between it, and the glass harps of the day.
- c) Performance of Ode to Joy once more on armonica, then Mozart's Adagio in C Major for glass armonica (played on glass harp).

45-50 Minutes