

Switch Access for Complex Communicators

Wednesday, October 18, 2017
9:30-10:30 AM

Adaptivation, Inc.
www.adaptivation.com

What is a Switch?

- A device that adapts equipment for individuals with disabilities to improve access to environment, movement, communication and computers.

Remember!

- It is important to determine your client's ability to access a single switch using a **MOTIVATING** activity.
 - switch toys
 - music
 - software

(do not use scanning at this point)

Top Tips for Switch Selection

- Movement Issues
- Positioning and Environmental Concerns
- Performance Variables
- User Input
- Professional or Family Support Pointers

Movement Issues

- Observe naturally occurring movements
- Look for a volitional movement
- Don't let it take away from communication interactions
- Social considerations in different settings
- Motivating movements will often win out

Hierarchy of Access Sites

- Hands
- Head/Voice
- Arms/Elbows
- Legs/Knees
- Feet

Positioning and Environmental Concerns

- Importance of prior TEAM assessment
- Reflexes: how do they interfere (i.e. ATNR)
- Space restrictions
- Different access site and switches for various settings or times of day
- 90/90/90
- Mounting issues

Performance Variables

- Target size
- Force
- Timing
- Accuracy
- Durability
- Safety and Fatigue

User Input

- Interest and acceptance
- Fun for younger users
- Increases independence
- Comfortable
- Ease of use
- Reliability
- Cost issues

Professional and Family Support Tips

- Wait, wait, wait for responses
- Offer frequent opportunities for use
- Try it yourself to see how it feels
- Model its use
- Ease and reliability of set-up for caregivers is key

Spectrum of Switch Use

- Play, exploration and leisure
- Communication
- Movement (power wheelchair)
- Activities of daily living (including ECU's)
- Education and computers
- Vocational
- TO ENHANCE ACTIVITIES

Switch Types

- Pressure or lever
- Pneumatic (sip and puff)
- Motion (mercury, infrared) Motoric (pinch, grasp)
- Sound Activated
- Photosensitive: Blink
- Physioelectric (muscle tension)
- Proximity: Papoo
- Taction Pad: Activated by moisture of skin¹²

Most Recognized Switch





Honey Bee

Proximity Switch



- Activated by placing hand, head or object over sensor window.
- Plugs into ANY communication aid, toy or computer switch interface.
- 3 ranges: 6", 3", 1", 0" (touch)
- Uses common battery (CR2032)
- Long battery life.
- 30" cord



Pal Pads

- Can be plugged into ANY communication aid or battery-operated assistive device
- Only need 1.2 ounces of force to activate
- 3 sizes
- Easily attach objects and textures
- Great for activities
 - Adapting books
 - Attaching to cases



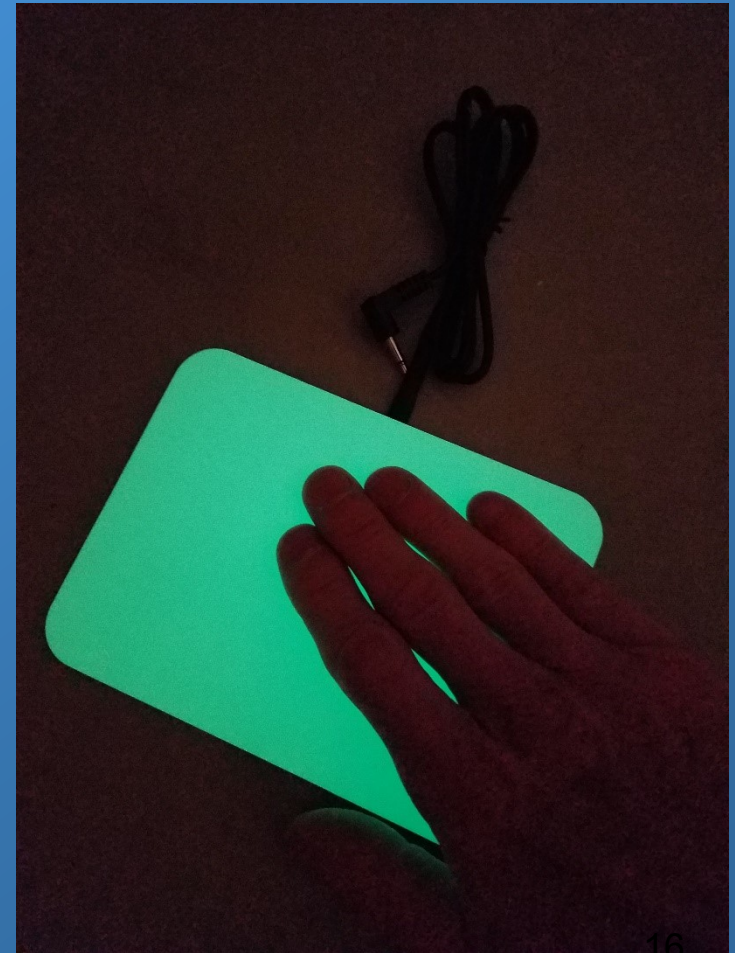


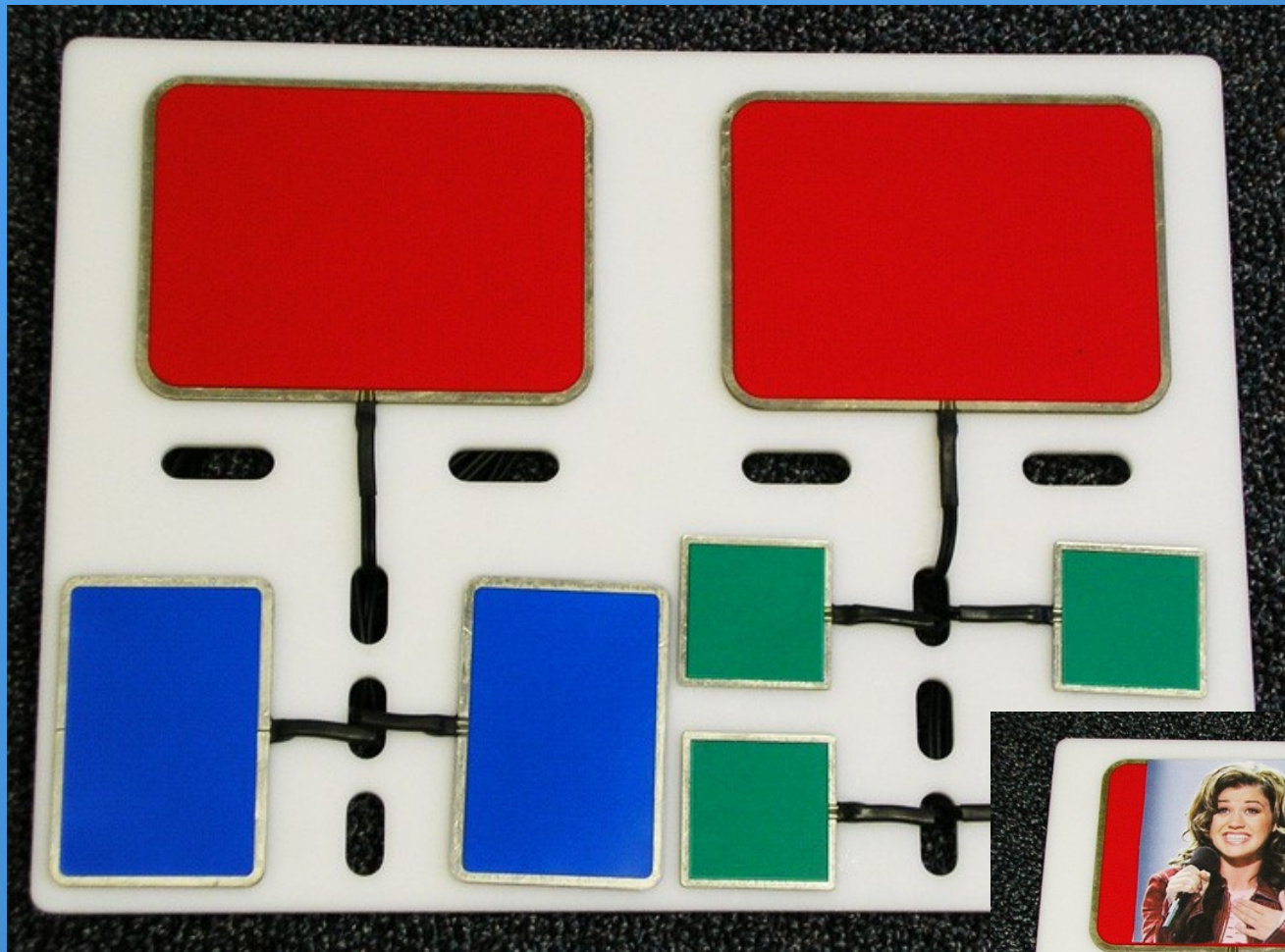
Pal Pads

Glow-in-the-Dark



- Can be used just like an ordinary Pal Pad or in darkness.
- Only need 1.2 ounces of force to activate.
- 2 sizes (Large, Small)
- Recharge for 5-10 minutes under incandescent or fluorescent light.
- Charge lasts 15-45 minutes.



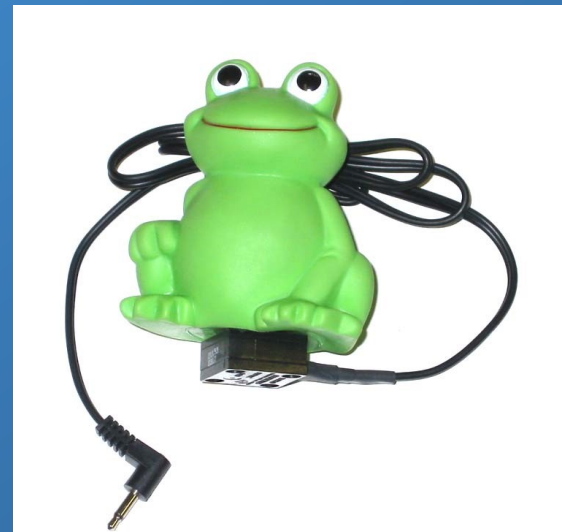






Pneumatic Switch

- Activates with a puff of air
- Great way to make an object-based switch
- Can use squeeze toys, balls or bottles









Flexible Switch

- Flat switch
- Adhesive-backed
- Pressure switch
- Works great in wheelchair headrests
- Flexible to the diameter of a coffee cup

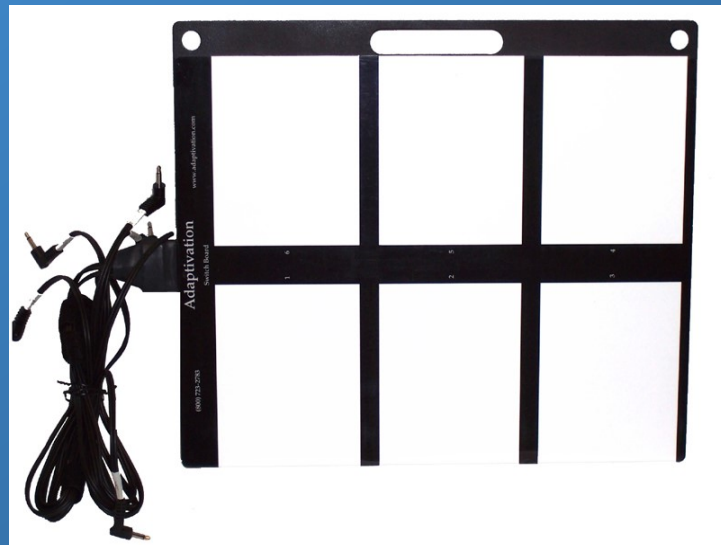






SwitchBoard

- Six switches in one confined area
- Each activation area is 4" x 5"
- 2 ounces of pressure to activate
- Can be used with any device that has 1/8th-inch jacks

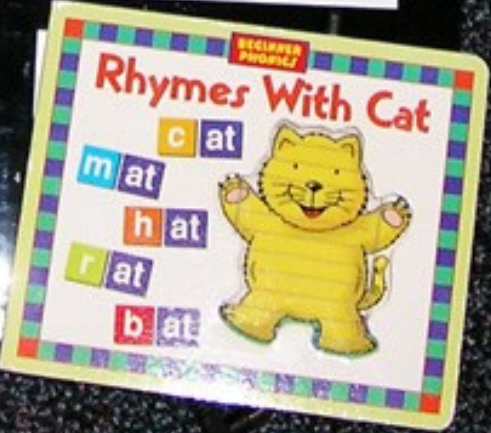








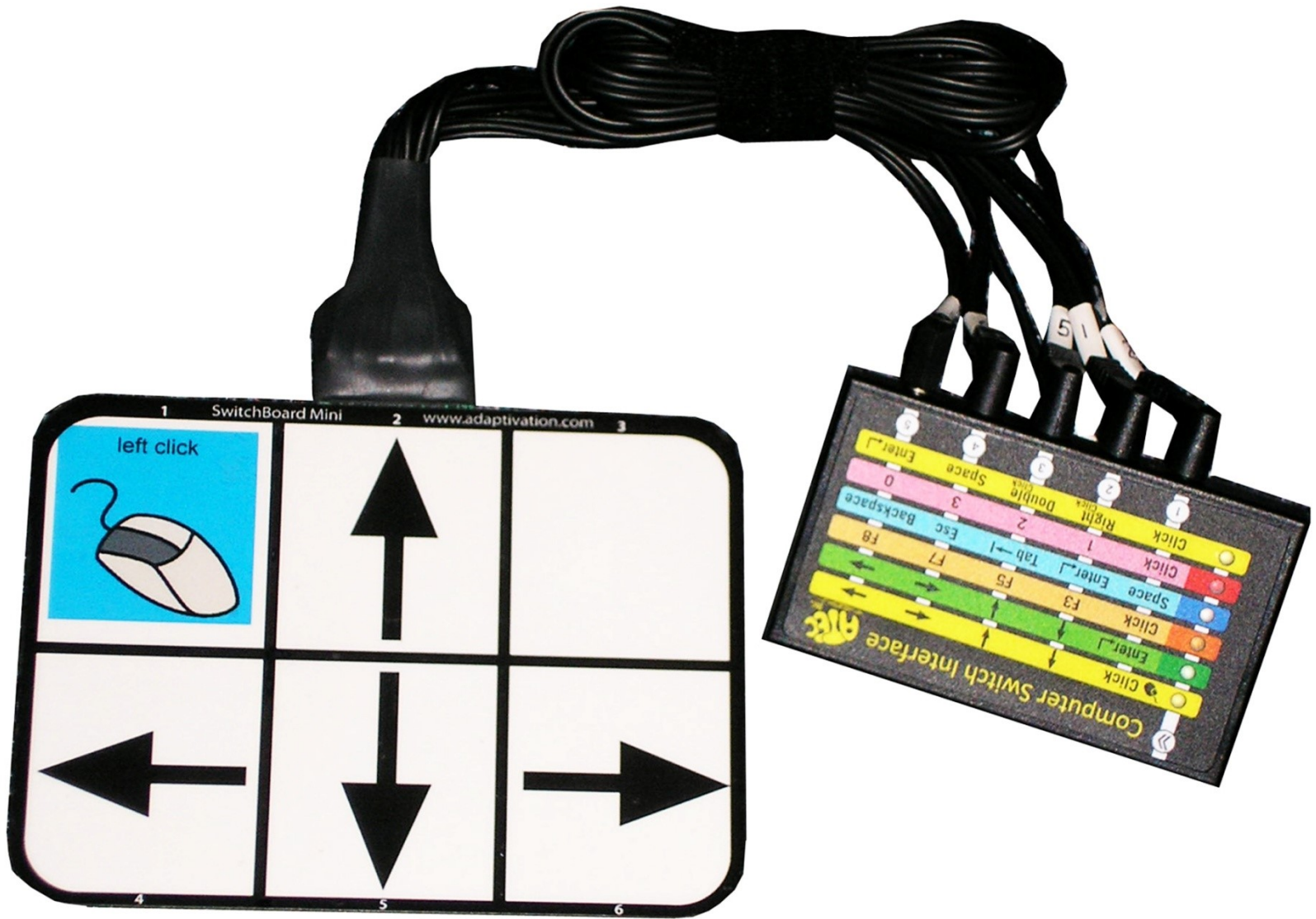
0800 723 2763 Adaptation Switch Board www.adaptation.com



Six Pack

- Six switches in one confined area
- Each activation area approximately 2"x2"
- 1.2 ounces of pressure to activate
- Can be used with any device that has 1/8th inch jacks







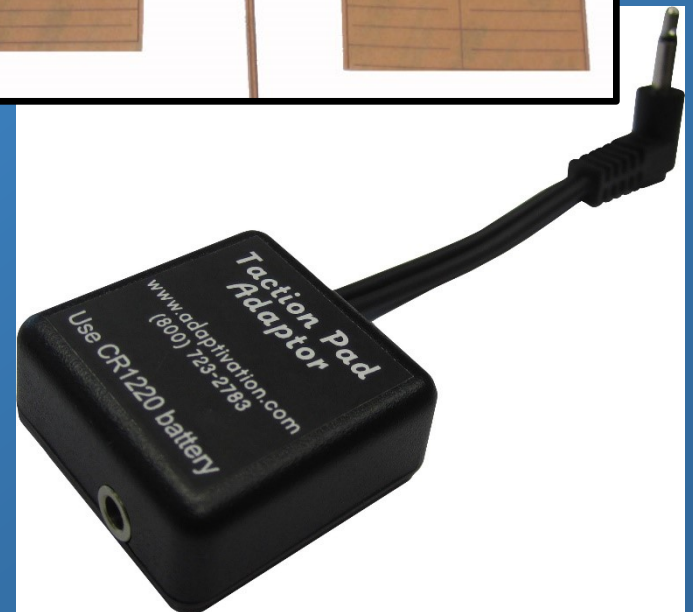


Taction Pads

- Reusability
- Durability
- Sensitivity
- Can be cut!



- Taction Pad Adaptor →





Online Safety Rules

I will...

- set up rules for going online: time of day, length of time online, and sites allowed.
- be a good online citizen and do nothing to hurt others or that is against the law.
- report inappropriate information to an adult right away.
- check with an adult before downloading or installing software.

I will not...

- give out my Internet passwords to anyone other than my parents or teacher.
- plan to meet anyone without first checking with a parent.
- give personal information without a parent's permission. This includes my photo, name, address, phone number, parent's work number, school name, location, or places I go.
- respond to, or forward, messages that make me feel uncomfortable.



We pledge
to follow the
rules!

Rules adapted from the Rules for Internet Safety from the Internet Alliance, Washington, D.C. and The National Center for Missing and Exploited Children, Alexandria, Virginia.

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Bright Box and Bright Box Tactile

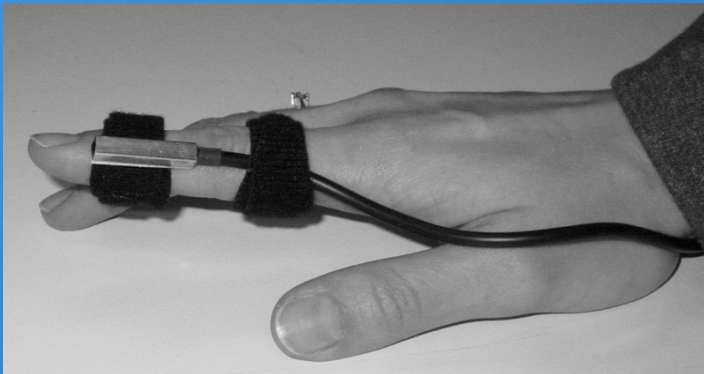


- Pressure switches
- Great for low vision or night time use
- Multiple function combinations
- Surface dimension approximately 4"x2"



Dipsy

- Tilt-sensitive switch
- Activated by a 30-degree tilt
- Can be used with any device that has a standard 1/8th-inch jack



LinkSwitch

- Is a duel switch/latch timer
- Multiple modes of operation
- Compatible with any standard switch







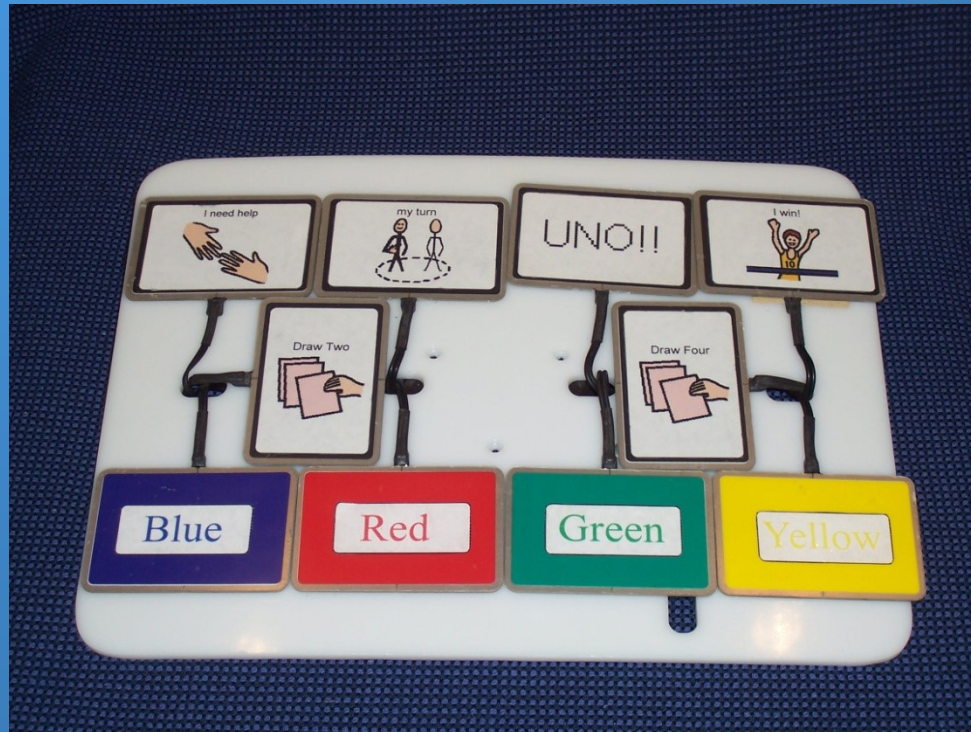
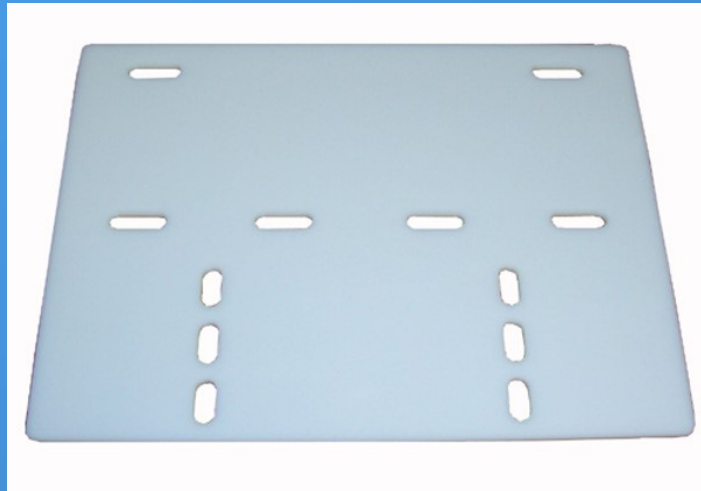


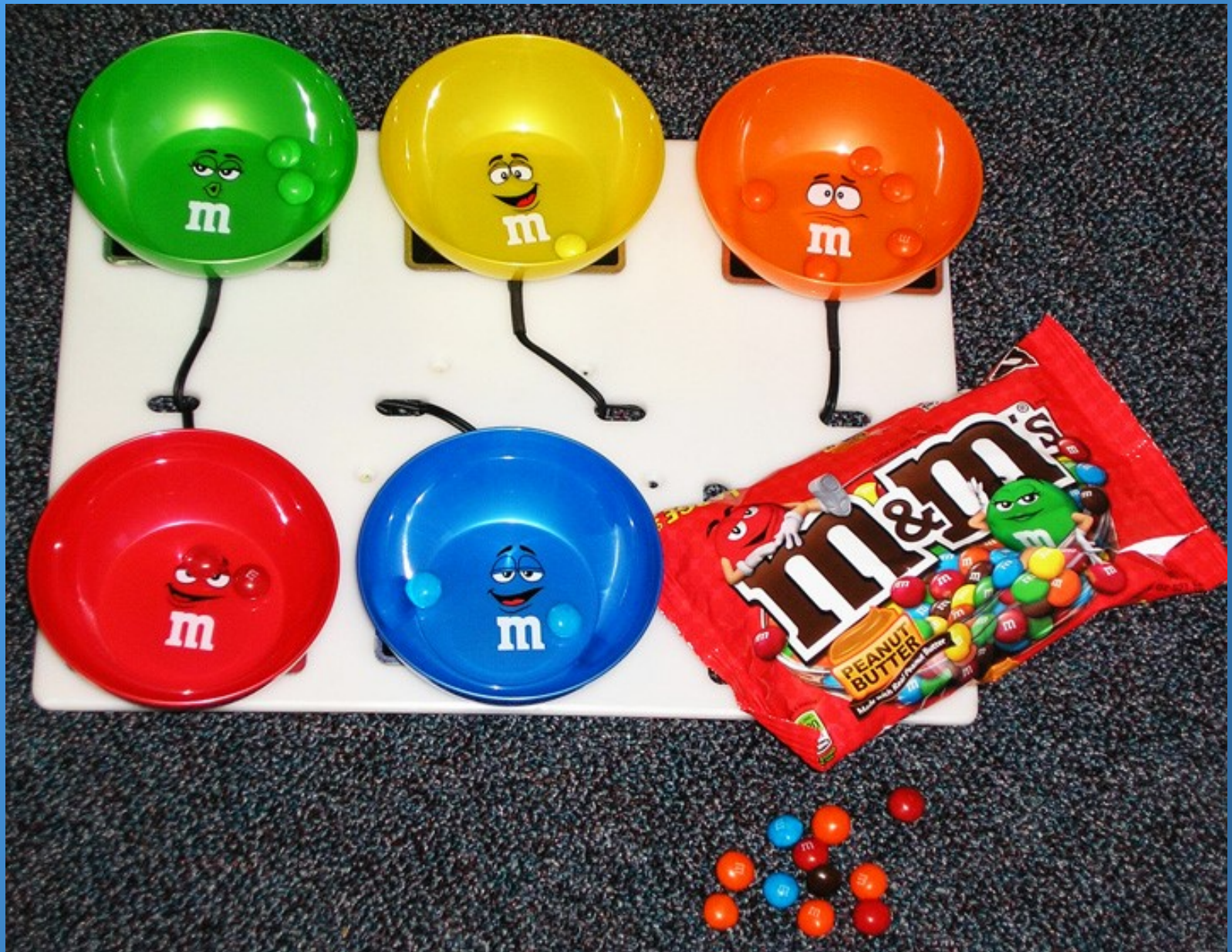
Mounting

- Many options available
- Keep weight of switch and/or device in mind when choosing appropriate mount
- Be sure and ask if mount is for positioning for access, organization of system, or both







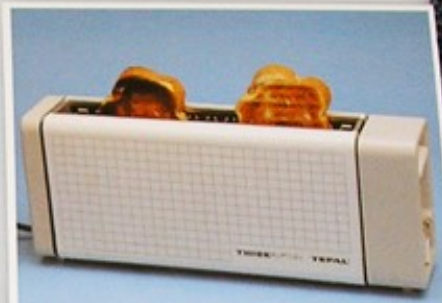




John's Morning



Drink Juice



Eat Toast



Brush Teeth



TV Time (15 minutes)



Leave for School



Resources

- *Adapt This...*
- Workshop/Presenter Packs
- Trial devices and Switches
- Training Videos
- Handouts
- Application Examples

- www.adaptivation.com

