

Time 30 minutes

Space Large open area, indoors or out, at least 10 feet by 10 feet.

Episode

In *Chaos as Usual*, the CyberSquad tracks players' past performances in Slugball so they can predict the best fielding strategies and stop Hacker from destroying Memoryville!

Materials

- foil balls (*at least 3 inches in diameter*), one for each pair of players
- "Play Slugball! Tracking Chart" handout (*included at end of this activity*)
- measuring tape (*optional -- to measure playing field*)
- masking tape
- pencils



Play Slugball!

Goal

To collect data about a player's performance, use it to predict how that player will perform in the future, and test that prediction.

Big Idea

Spot a pattern in a player's performances and you can predict what that player will do in a game.



Getting Ready

Make Connections to...

Sports

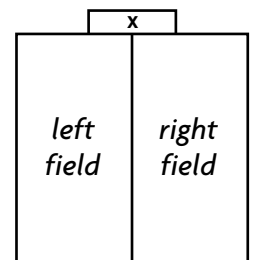
Ask any baseball fan: left-handed hitters tend to hit to right field. Right-handed hitters tend to hit to left field. Power hitters tend to hit the ball long and far. Lead-off batters use lighter bats and tend to hit shorter line drives and infield grounders. Learning to analyze data and to predict where a ball is probably going to be hit is an important part of becoming a great fielder. Coaches, players, and sports analysts all rely on data from players' past performances to plan strategies for winning games.

Setup

Have kids work in pairs. Make foil balls and set up the "playing field" ahead of time as shown, using masking tape. If you have the space outdoors, one field for every two players is ideal, but kids can also take turns using an indoor field.

Other preparations before starting:

- Review all materials ahead of time.
- Preview the episode and segment.
- Make copies of "Play Slugball! Tracking Chart" handout, one per child.
- If using the episode or segment with kids, set up DVD player and monitor (*episode provided on DVD*).





Play Slugball!

continued from page 1

Working with Kids

Most likely, kids in your group do not yet appreciate how players' performance data can be used as a tool to develop a winning team strategy. They need concrete experiences collecting and then analyzing the data to decide on a good defensive game plan. This activity is designed to give them that experience.

- 1 Share an example with kids where looking for a pattern in a player's performance helped in devising a good defensive strategy. For example, during a kickball game, kids on a team kept track of which part of the field each player on the opposing team kicked the ball to. As they did this during the first few innings, they noticed that the best kicker kicked it down the third-base line almost all the time. So, later in the game, they used that pattern to predict where that player was likely to kick it next time up. They put their third baseman on alert and were prepared to make the catch -- before it happened!

Share the **Big Idea** listed on page one, and invite kids to share their own examples of performance patterns they have observed.

Optional: Use the episode or segment to further explore this idea.

- 2 Tell kids that they are going to play their own version of the Cyberchase game of Slugball, where they toss the ball instead of batting it. They get to take turns tracking how a "batter" performs and being the "batter" themselves. Explain the layout of the playing field and the rules of the game:
 - Each batter gets 10 tosses, and stands with their back to the field and tosses the ball over their head.
 - The "fielder" tracks where each toss lands on "Play Slugball! Tracking Chart" (does not try to catch it).

Tip You may want to demonstrate how to stand with your back to the playing field, how to toss the ball directly over your head, and how to track where the ball lands on the tracking chart.

Play Slugball!

continued from page 2



- If the ball lands out of bounds, it does not count as one of the 10 tosses and the batter gets another toss. If it hits the ceiling but then lands in the field, the fielder records where it lands. If it lands in one area and then rolls into another or out of bounds, the fielder records where it first lands. If it lands partly in an area and partly out of bounds, the fielder marks it as in that area.
- After collecting the data and making a prediction, it's time to test the data! The fielder stands on the side of the field where the ball landed most often and tries to catch the ball. Did it work?
- Now fielder and batter switch positions.

- 3 Provide each child with a "Play Slugball! Tracking Chart." If using only one playing field, have pairs of kids take turns playing as the rest of the group looks on. If using several playing fields, divide kids into groups so they can take turns as described. At the end of 10 throws, invite the fielder who has been tracking the tosses to share their chart with the group. **Ask:** *Do you see a pattern in how [child's name] tosses the ball? What advice would you give to the fielder about where best to stand to catch the next toss?*
- 4 To close, share the information in **Make Connections to ...** and invite kids' comments. Then ask, "Was there something you learned today that you didn't know before, or that you would like to try on your own?" Listen to responses.

Taking It Further

Invite kids to find examples of data related to their favorite sports players, such as box scores from a newspaper, to share with the group. Try this same activity concept with a playground sport such as kickball or softball. Duplicate a diagram of the playing field that shows sections of the field so that kids can track where different players hit or kick the ball and plan their defense around the patterns they observe.