



“42 Days of BEST” For Schools - General

The following is a “generic” schedule to follow. Each hub establishes its own guidelines, deadlines, etc. Different teams organize themselves in many different ways. This is just one example of tasks to manage.

Pre-Kick Off

- Recruit support (teachers, mentors, parents)
 - **Industrial Arts/Shop** – provide workspace, tools, expertise, after-hours access; serve as safety officer; support the “manufacturing process”
 - **Computer Science** – supervise web team administration, web site design
 - **Graphic Arts/Journalism** – supervise BEST Award project summary notebook, table display design/construction
 - **Drama** – BEST Award oral presentation and table display interview coaching
 - **Travel Agent/Parent** – someone to help organize 3 trips (Kick-Off, Mall Day, Game Day, plus potentially Regionals in Auburn in Nov. / Dec.); distribute / collect permission slips, medical release forms, lodging, etc.

- Recruit mentors locally
 - Make sure they understand the time commitment, but also give them flexibility!
 - Anyone can be a mentor - parents are welcomed!
 - No engineering degree or robotics experience required
 - Folks with technical or mechanical interest and experience are most helpful
 - Engineers / technical professionals can be found in college instructors & students, public utility companies, manufacturers, engineering firms, building & construction contractors, etc.
 - Marketing / business professionals can be found in college instructors & students, banks, advertising agencies, many businesses

- Recruit students for BEST team
 - Determine eligibility (GPA restrictions, discipline)
 - Recruit students from mixed grades (middle through high school is best for longevity of the team, leadership development, diversity, etc.)
 - Stress BEST is a student-led, not teacher- or mentor-led competition
 - Stress ownership by and responsibility of student team members
 - Identify strong officer material – competent, dependable students (these leaders should be chosen by the teacher(s), NOT by popular vote of the students)

Develop local funding support

- Work with Fundraising Team Leader to:
 - Identify needs
 - Travel (transportation, food and/or lodging) to BEST events
 - T shirt printing
 - Materials for BEST Award (engineering notebook, oral marketing presentation, trade show / educational display)
 - Spirit materials (banners, posters, shakers, etc)
 - Prepare an estimated budget
 - Identify local sponsors
 - Consider a BEST Booster Club!
 - Devise solicitation plan/campaign
 - Develop a process for handling contributions
 - Develop sponsor recognition efforts

Conduct team building exercises with students & mentors

- “Break the ice” so students and mentors feel comfortable in team setting
- Work with mentors to lead activities
- Utilize activities on the Teacher-Mentor Training Workshop CD, check the internet, or create your own
- Incorporate a “reflection component” to each activity
 - *What did you learn about yourself? About others?*
- Incorporate opportunities for mentors to share how leadership and teamwork are used in their work
- Establish a team rule – “No Whining!” Things don’t always go as planned and life is not always “fair,” but *THAT’S LIFE!* Learn to accept it, work around it, fix it or just move on! Whining &/or quitting solve nothing!

Begin BEST Award discussions

- Identify who will work on BEST Award (engineering notebook, oral marketing presentation, trade show / educational display and interview, web site design, possible video, and t-shirt / team logo design)

Conduct pre-construction session with students, mentors

- Have “safety officer” lead a tool and shop safety session
- Go over in-case-of-emergency steps
- Set up ground rules for tool use
- Go over medical release form (if appropriate)
- **NOTE: it is always appropriate for mentors to operate power equipment instead of students! BUT students should ALWAYS watch and ask questions, so they fully understand the process and can explain it in their interview.**

Kick Off Day planning

- Travel plans (transportation, food, release forms)

- **NOTE:** you will need room for:
 - Four (4) pieces of plywood (ea 4-ft. square)
 - Bundle of pvc pipe (4” wide x 5’ long)
 - Large box of parts
- Team assignments (sub-groups for playing field and robot dynamics, BEST Award team leader, photographer, etc.)

Week One

Attend Kick Off Day

- Team registration
- BEST Award sign-up
 - Attend BEST Award meeting (for teacher/students) – if offered
- Receive Returnables Kit, Consumables Kit, Game Rules packet
- Video/photograph playing field

Check BEST Award progress

- Establish team “theme” after studying the game
- Establish specific committees
 - Finance
 - Publicity
 - T-shirt design
 - Team song / chant / cheer
 - Engineering Notebook / thorough project documentation
 - Table Display
 - Photography
 - Oral Presentation
- Help finance team get started (*Strategy for fundraising*)
- Establish time-line for each sub-project
- Establish committee meeting times – work with mentors’ schedules if their input is needed.
- Take pictures & videos of every part of the process and every team member!!

Hold team meeting

- Advise Tech. Team to take daily notes for engineering notebook documentation
- Study game rules
- Select a Game Rules monitor (an expert who will keep the team in compliance)
- Discuss construction of mock playing field
 - ***NOTE: this would make a great mentor or parent support group project!***
- Discuss and plot strategy for design and construction
- Test motor capabilities
- Begin design discussion
- Assign team members to sub-groups

- Manage fundraising efforts
- Review No Whining! rule

Week Two

- Continue design discussion
- Build running platform / robot chassis
- Perform preliminary design (use scrap materials, cardboard, etc. – not final building materials)
- Continue BEST Award progress
 - Remind Tech. Team to take daily notes for engineering notebook documentation
 - Committees should give regular progress reports to the coach and to the BEST Award team
 - Establish ideas for team “give-aways” (order, buy, beg, make)
 - Be sure to write thank you notes to any sponsors....this process should be ongoing throughout the six weeks and beyond
 - Remind the Robotics team to keep written progress reports that can be used in the engineering notebook
 - Take pictures & videos of every part of the process and every team member!!
- Manage fundraising efforts

Week Three

- Finalize design and build!!! (Construction phase in full-swing)
- Continue BEST Award progress
 - Remind Tech. Team to take daily notes for engineering notebook documentation
 - Check status of t-shirt design and printing
 - Check materials for trade show booth / educational display
 - Continue documentation for engineering notebook
 - Start coordinating with other school support (band, cheerleaders, mascot, etc)
 - Schedule community visits to promote BEST
 - Take pictures & videos of every part of the process and every team member!!
- Mall Day Sign-up Deadline
- Manage fundraising efforts
- Review No Whining! rule

Week Four

- Mall Day – this coming Saturday!!
- Continue construction phase
- Continue BEST Award progress
 - Remind Tech. Team to take daily notes for engineering notebook documentation
 - Contact newspapers: write article/photos
 - Order T-shirts
 - Sketch out script for oral marketing presentation
 - Team-building activity (morale booster)
 - Take pictures & videos of every part of the process and every team member!!
 - Get ready for Mall Day – support the Robotics team
- Make plans for traveling to Mall Day
- Review No Whining! rule
- Attend Mall Day
 - Optional event for all teams
 - Suggestion: don't reveal too much about your machine -- limit adornment!
 - **NOTE:** we strongly recommend that teams attend Mall Day even if their machines are not functional. This is a great way to check out the competition and “borrow” great ideas (corporate espionage) to help you solve a problem or improve your team's design.
 - **NOTE** – in the *real world* you should always protect your “intellectual property” (i.e. creative designs, business processes, best practices, etc.) through patent laws, so others cannot steal them. However, for the purposes of BEST, it is allowable. Consider it a compliment if another team likes your design well enough to “borrow” it! And remember, NO WHINING!!

Week Five

- Complete construction
- Test drive machine – PRACTICE! PRACTICE!! PRACTICE!!!
- Continue BEST Award progress
 - Remind Tech. Team to take daily notes for engineering notebook documentation
 - Start assembling trade show booth / educational display
 - Fine tune oral marketing presentation - PRACTICE! PRACTICE!!PRACTICE!!! Plan for what happens if all technology fails during the competition!
 - Organize give-aways
 - Engineering Notebook should be almost complete
 - Put up promotional flyers at the school and in the community

- Assemble project engineering notebook after Mall Day
- Take pictures & videos of every part of the process and every team member!!

Update sign-up schedules

- Due by Tuesday of Week Six:
 - BEST Award Project Engineering Notebook
 - BEST Award Oral Marketing Presentation Schedule Sign-up

Review No Whining! rule

Week Six

Finalize construction and/or make repairs

Continue test-driving and driving practice

Finalize BEST Award components

- Entire team briefed about:
 - the robot design
 - the team table display
- Review good sportsmanship
- Rehearse oral marketing presentation, paying particular attention to time constraints. PRACTICE! PRACTICE!! PRACTICE!!! Plan for what happens if all technology fails during the competition!
- Put finishing touches on trade show booth / educational display

Sign-Up Deadline (Tuesday of Game Week)

- BEST Award Project Engineering Notebooks mailed/delivered
- BEST Award Oral Presentation Schedule Sign-up
- BEST Award Oral Presentation Equipment Sign-up
- Drivers List

Game Day

Team registration (on-site)

- BEST Award Engineering Notebook pick-up
- BEST Award Oral Marketing Presentation room assignments

BEST Award trade show booth / educational display set-up (by a pre-determined time – may be allowed the evening before)

Compliance Check-in

Opening ceremony

- Official welcome

- ☑ BEST Award Trade Show Booth / educational display & Interview judging

- ☑ Robotics competition (Preliminary Round 1)

- ☑ Robotics competition (Preliminary Round 2)

- ☑ Robotics Competition (Championship Round)

- ☑ Awards ceremony
 - Introduce key personnel and judges
 - Competition Awards (1st – 3rd place teams)
 - BEST Award (1st – 3rd place teams)

- ☑ Brief meeting after competition for advancing teams
 - Sign-ups and deadlines at Regionals
 - Engineering Notebook / Project Summary deadline (due date)
 - Team photo sign-up
 - Oral Presentation sign-up

- ☑ If NOT advancing, RETURN ROBOTICS “Returnables” Kit Materials BEFORE LEAVING!! (electronics, controllers, brains, etc.)