Assembled Den Meeting Plan – BEAR (3rd Grade)

This ***Assembled* Den Meeting Plan** combines ideas from Bear Den Meeting Resources found at Scouting.Org or from the requirements themselves, into the parts of a quality Den Meeting, which are **Preparation** (plan + collect materials needed), **Gathering** (something for early arrivals to do), **Opening** (a ceremony to start), then **Activities** (an Activities Intro chat, followed by a series of activities, ideally alternating quiet and energetic fun), **Closing + Recognition** (ceremony), and **After the Meeting** (follow up) …

Bear – 3rd Grade

Race Time Bear

A "Racing" Adventure (Pinewood Derby or Raingutter Regatta)
ELECTIVE (2 "electives" are needed to earn the Rank of Bear)

Snapshot of Adventure. There are many ways to make things go — electricity, fuel, and batteries, to name a few. Did you know that you have the power to make a boat sail in the water or that a car can move using the force of gravity? Propulsion is what gives an object (such as a plane, car, or boat) the power to move. You will learn different ways to make and propel vehicles. Think about how the shapes of cars, boats, and planes affect the distance they can go. In this Adventure, you'll explore how you can use the air in your lungs, the force of gravity, and the power of your imagination to make things go.

The QR Code above takes you to scouting.org/cub-scout-adventures/race-time-bear/

This Den Meeting Plan adapts Activity ideas from that Scouting link with other fun, simple, easy ideas. For more, see the Adventure Resources at the end of this Plan for a list of the suggested Activities at that link.

Requirements from the Bear Handbook

1. **With an adult, build either a Pinewood Derby® car or a Raingutter Regatta™ boat.**
2. **Learn the rules of the race for the vehicle chosen in requirement 1.**
3. **Identify how you could increase the speed of your chosen vehicle.**
4. **Before the race, discuss with your den how you will demonstrate good sportsmanship during the race.**
5. **Participate in a Pinewood Derby or a Raingutter Regatta.**

Meeting Plan

Does this take one Meeting to complete – or more? For 99.9% of Scouts, this involves an "assemble and decorate" session followed by a separate Pinewood Derby or Raingutter Regatta.

PREPARATION (and materials needed): Read the Race Time adventure in the Handbook.

- Key decision -- Pinewood Derby or Raingutter Regatta.
  - And when and where it will be held. That's usually a Pack event.
  - But if you have a track and want to have multiple Pack derbies, or Den and Pack derbies, or races like Adult Derby, Family and Friends Derby, "Outlaw" Derby (e.g., heavier cars), Fun Racing as a Recruiting activity at schools, go for it!
- Follow up decisions – where to conduct the "assemble and decorate" sessions.
  - Recruit adult helpers with some skills and tools, like power tools, sanders, paint, brushes, weights.
  - Note: your Cubmaster and Den Leader may not be the most skilled Derby Car or Regatta Boat builder. Many Packs recruit the parents of high performers to help "next year" in Derby Car builds.

GATHERING: A "gathering" activity is to keep Scouts occupied as the rest of the den arrives. *What you do will depend on your location and leadership resources*.

- Use gathering time to connect with adults and "share the leader load": everyone can help with something! A good approach is for different parents (or teams) to share the "lead" of parts of the Adventure below.

OPENING: (Parent leader: _____) An Opening ceremony says, "we've begun" and helps set the tone.

- Maybe: a simple ceremony you like that includes the Pledge of Allegiance and the Scout Oath and/or Law.

ACTIVITIES (See also other Activities linked at Adventure Resources below – use those if you like them):

◆**Activity Intro:** (Parent leader: _____) As you move into Activities, have some "talk time" where you (1) discuss today's Adventure activities (what you'll do, how you'll do it – share in a way to get the Scouts excited) and (2) let each of the Scouts share "what's new" with them and get to know each other better.

◆**Activity 1: Build It! (Requirement 1: "***With an adult, build either a Pinewood Derby® car or a Raingutter Regatta™ boat.***")** (Parent leader: _____)

Pinewood Derby Assembly and Decoration ideas (see Pinewood Derby Car Build Day Bear for supplies and materials and other ideas about how to do Pinewood Derby Car assembly):

- **Draw a design for your car.** You can use the Bear Handbook for some design ideas. (Tip: *you will find many design ideas out there on the internet*).
- **Cut out your car from the block of wood.** Cub Scouts may use a handsaw, or an adult may use a power tool to cut out the car. (Tip: *go with the adults on the power saw.*)
- **Sand the car.** Sanding removes any sharp corners and allows paint and other decorations stick better.
- **Paint and decorate your car.** Pinewood Derby cars are made of soft wood. When painted, it may take a couple of layers or coats of paint. Paint the car once.
  - When the paint is dry, you can use sandpaper to lightly sand it.
  - Clean off any dust from sanding and paint it again. Repeat until the desired look is achieved.



- **Assemble your car.** Using the nails that came with the kit, attach the wheels that came in the kit to the car in the pre-cut areas on the bottom of the car.
- **Check the weight.** *Do this step last* as everything else will either add or subtract weight from the car. The car should weigh exactly 5 ounces. If it weighs less, additional weight may be added. (Tip: *while you are not allowed to be over-weight, you do* ***not*** *want to be under-weight. Weight=speed.*)

  Tip: Make sure the axles are square, at a 90-degree angle. This will keep the car straight when going down the track. If the axles are not square, the car may want to turn and rub up against the track causing it to slow down. Test the car by simply pushing it across the floor to see if it goes straight.

Raingutter Regatta Assembly and Decoration (see Raingutter Regatta Build Day Bear for supplies and materials and other ideas about how to do Raingutter Regatta assembly):

- **Sand the wooden hulls.** It is easier to sand the wooden hulls before the boat is assembled.
- **Attach the plastic cabin** to the two wooden hulls using the screws provided.
- **Paint and decorate your boat.** If painting, use a primer first; this will help the paint stick to the plastic parts of the boat. The sail may be decorated also.
- **Assemble the sail and mast.** Use a small bit of glue in the hole where the mast will go, then place the mast into the hole. Allow the glue to dry before attaching the sail.

Tip: Add wax to the bottom of the boat, the hull, to make it extra smooth. The smoother the hull, the faster the boat can go.

Idea For A Different Way to Race: Maybe do a "recycled" Raingutter Regatta with boats made from recycled materials.

- See https://scoutingmagazine.org/2017/04/make-your-raingutter-regatta-a-recycle-regatta/.

◆Activity 2: Know The Rules! (Requirement 2: *"Learn the rules of the race for the vehicle chosen in requirement 1."*) (Parent leader: _____)

You can play a word scramble game found in the Adventure Resources, or just review the rules.

- Most of the rules below relate to how the car is put together.
- That means that Scouts and adult partners will be talking about these as they work together to make the car.
  - Right? Scout and adult. Not "only adult".
- If a parent is "taking over" and not doing the car build together with their Scout … *you are doing Cub Scouting wrong!*
- So please share the rules with your Scouts, and discuss what you're doing to follow the rules.



Common Pinewood Derby Rules from https://scoutlife.org/hobbies-projects/pinewood-derby/157283/official-rules/ (read all the way through for some *optional* rules and examples from local Packs, Districts and Councils) – but note that ***your local Derby rules may be different*.**

- CAR SPECIFICATIONS:
  1) Width — shall not exceed 2-3/4 inches.
  2) Length — shall not exceed 7 inches.
  3) Weight — shall not exceed 5 ounces.
  4) Width between wheels — 1 3/4"
  5) Bottom clearance between car and track — 3/8"
- OTHER RULES:
  1) Wheel bearings, washers and bushings are prohibited.
  2) The car shall not ride on springs.
  3) Only official Cub Scout Grand Prix Pinewood Derby wheels and axles are permitted.
  4) Only dry lubricant is permitted.
  5) Details, such as steering wheel and driver are permissible as long as these details do not exceed the maximum length, width and weight specifications.
  6) The car must be freewheeling, with no starting devices.
  7) Each car must pass inspection, the owner will be informed of the reason for failure, and will be given time within the official weigh-in time period to make adjustment.
  8) After final approval, cars will not be reinspected unless the car is damaged in handling or in a race.

Common Raingutter Regatta Rules from https://www.scoutshop.org/blog/5-simple-tips-to-help-cub-scouts-get-ready-for-the-raingutter-regatta-.html – but note that ***your local Regatta rules may be different*.**

1) You must use all the pieces in the Trimaran Boat Kit.
2) You cannot add weights to your sailboat.

3) No sails may be used other than the one supplied in the official kit.
4) The sail must be mounted on the mast using holes provided in the sail. The sail may be glued to the mast at the two points of contact with holes in the sail.
5) You cannot glue your sail to any other point of the hull.
6) The maximum length is 6 3/4" long, and the minimum length should be no less than the length of the hull provided in the kit.
7) The mast may not be shortened.

◆Activity 3: Speed Rules! (Requirement 3: *"Identify how you could increase the speed of your chosen vehicle."*) (Parent leader: _____)

5 Tips to Building the Fastest Pinewood Derby Car:



1) Choose the right car shape.
2) Bake the wood block.
3) Use axle guards.
4) Smooth the axles.
5) Lubricate the wheels with graphite.

See https://www.scoutshop.org/blog/5-tips-to-building-the-fastest-pinewood-derby-car.html

5 Simple Raingutter Regatta Tips:



1) Use the Official Raingutter Regatta Racing Kit
2) Practice Blowing the Sails
3) Make Sure Your Boat Doesn't Break the Rules
4) Don't Use Water-Based Paints
5) Make Sure You Have Fun

Yes, the QR code in Boat Fine Tune takes you to those five tips at https://www.scoutshop.org/blog/5-simple-tips-to-help-cub-scouts-get-ready-for-the-raingutter-regatta-.html, and although the Activity Snapshot for says "Cub Scouts identify three ways to make Raingutter boats go faster", you just need one.

◆Activity 4: Be A Good Sport! (Requirement 4: *"Before the race, discuss with your den how you will demonstrate good sportsmanship during the race."*) (Parent leader: _____)

- Gather Scouts and Adult Partners and explain that during the race we want to show good sportsmanship.
  - Ask Scouts what do they think good sportsmanship means? Maybe:
    - Follow the rules.
    - Always do your best.
    - Encourage others.
    - Respect the judges.
    - End with a handshake.
- Ask Scouts what parts of the Scout Law we should follow to demonstrate good sportsmanship. Maybe:
  - Trustworthy (we follow the rules of fair play, and don't try to get an unfair advantage)
  - Loyal (we're always supporting our fellow Scouts, even if they come in first and we don't)
  - Helpful (by helping with the setup and game play)



- Friendly (we're all friends as fellow Scouts, even in a race competition)
- Courteous (for good sportsmanship and listening to instructions)
- Kind (be caring and supportive of our fellow Scout racers)
- Obedient (we follow the rules and instructions)
- Cheerful (we're having fun even if we don't come in first)

🔶Activity 5: Race On! (Requirement 5: *"Participate in a Pinewood Derby or a Raingutter Regatta."*) (Parent leader: _____)

Pretty simple – if you've got your car or boat, enter your Derby or Regatta and have fun!

CLOSING: A Closing ceremony ends the meeting and highlights the achievements – for a Derby or Regatta you may have a big ceremony with various trophies, ribbons or other awards. Den and/or Pack leaders can reflect on the meeting + praise Scouts for specific good actions today. Thank every Parent who helped.

- If you have them, award Loops to all who completed the requirements.

AFTER THE MEETING: Clean up as needed. Share refreshments if that's what you like.

Upon completion of this Adventure, your Bears will have earned the Adventure Loop for it. Make sure they are recognized for their completion by presenting the Adventure Loops, to be worn on their belts, as soon as possible according to your pack's tradition. Text or email all Den parents to share these resources for future reference and so parents of Scouts who could not attend may complete this Adventure from home.

ADVENTURE RESOURCES: Den Meeting Resources and "Activity Card" options for this Adventure are found at https://www.scouting.org/cub-scout-adventures/race-time-bear/. Those resources include the Snapshot of Adventure (included above), a "Safety Moment" of tips and links about doing this safely, and, for each Requirement, one or more "Activity Cards" you can click on for an activity to complete the Requirement.

Those "Activity Card" pages are linked below – along with the "Key" scoring of (a) whether the Activity must be done Outdoors, may be done Indoors, or involves Travel; (b) how much Energy Scouts will generate; (c) How "Supply Intensive"; and (d) Prep Time – those last 3 categories are scored on a 1 to 5 scale, with 5 being "most". Note that while that website page says, "Choose one of the following" before the "Activity Cards", what that means is "Choose one of the following – *or do some other activity that will meet the Requirement*", because the Requirements are required, not the Activity Cards. In the Assembled Den Meeting Plan above we have adapted some of what's below or other ways to complete the requirement in easier ways.

1. **With an adult, build either a Pinewood Derby® car or a Raingutter Regatta™ boat.**
   - Pinewood Derby Car Build Day Bear (Indoor; **5** of 5 Energy; **5** of 5 Supplies; **4** of 5 Prep Time)
   - Raingutter Regatta Build Day Bear (Indoor; **5** of 5 Energy; **2** of 5 Supplies; **4** of 5 Prep Time)
2. **Learn the rules of the race for the vehicle chosen in requirement 1.**
   - Pinewood Derby Rules Bear (Indoor; **2** of 5 Energy; **2** of 5 Supplies; **2** of 5 Prep Time)
   - Raingutter Regatta Rules Bear (Indoor; **2** of 5 Energy; **2** of 5 Supplies; **2** of 5 Prep Time)
3. **Identify how you could increase the speed of your chosen vehicle.**
   - Boat Fine Tune (Indoor; **2** of 5 Energy; **2** of 5 Supplies; **2** of 5 Prep Time)
   - Car Need for Speed (Indoor; **2** of 5 Energy; **2** of 5 Supplies; **2** of 5 Prep Time)
4. **Before the race, discuss with your den how you will demonstrate good sportsmanship during the race.**
   - Team Player (Indoor; **2** of 5 Energy; **2** of 5 Supplies; **2** of 5 Prep Time)
5. **Participate in a Pinewood Derby or a Raingutter Regatta.**
   - Pinewood Derby Race Bear (Indoor; **5** of 5 Energy; **5** of 5 Supplies; **5** of 5 Prep Time)
   - Raingutter Regatta Bear (Outdoor; **5** of 5 Energy; **5** of 5 Supplies; **5** of 5 Prep Time)