

Chapter 1 : Slide show: Exercises to improve your core strength - Mayo Clinic

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Dedication [Page ix] We would like to thank Kay Manley and Sue Hawkins for their love, support, and infinite patience throughout the process of writing this book. They and their cohorts are the future of our nation and our global society. We spent many hours in this labor of love in hopes that we could make a difference in the lives of teachers and students. We learned school leaders and teachers need the same caring, loving, and demanding family that children need. Much of what we propose in this book relies upon trust in each other as professionals who see our own fallibility and vulnerability as we try to improve learning for all children. Rich dedicates this book to his wife Sue, his daughter Jacqui, son Bob and his lovely wife Jess, and my beautiful, bright, and loving grandchildren Jack, Camryn, and Jamison. The truth be told, having grandchildren just entering or about to enter our public schools was a very real motivator for writing this book. We hope this book reveals new pathways for educational leaders and teachers in the United States to succeed where others have failed. We hope they defy gravity and inertia and use the Common Core State Standards CCSS as an opportunity to discuss and challenge all of the political hyperbole and the preconceived notions about education that our nation holds. We hope that they integrate the common core standards into their daily lessons and develop world-class schools systemically. Our nation and grandkids are depending upon you! We have 50 states with 50 sets of standards for their educational systems. Admittedly, the Constitution of our great country placed the obligation for the development and administration of public schools on the backs of the states. Consequently, our 50 states have fiercely guarded that prerogative in the past and, until recently, fought off attempts by our federal government to interfere in education matters. It was Lyndon Johnson who, in , shepherded the passage of the Elementary and Secondary Education Act ESEA through Congress, signaling the first large-scale incursion of the federal government into education. Under the civil rights banner, ESEA attempted to equalize the playing field for the children of poverty. Federal dollars would flow to school districts with large concentrations of poor children to ensure that they would have an equal opportunity to receive a quality education. For more than 30 years, school district accountability for the funds received was restricted to reports about how federal funds were spent. The districts and schools receiving federal dollars had annual reports to file with the Department of Education DOE. Today, every public school in America must make Adequate Yearly Progress on state exams and evaluate teachers according to student performance on state and local tests. In recent years, the specter of global competition has extended to education with international academic competitions that do not flatter the performance of American students. By comparison to countries like Finland, Singapore, and most recently Shanghai [Page xii] not a country, by the way, but a Chinese province , our students do not fare well. We can debate whether the comparisons with much smaller countries and a province are fair. It seems obvious that we would be better off if we, like the countries we compete with, had one set of national standards. Thus, the dilemma—our states do not want the federal government imposing a set of standards, yet in addition to international competitions, there are many reasons why our schools would benefit from national standards. To help expedite the process, the U. DOE has awarded two grants for the development of instruments that would assess student progress toward the common core standards. A number of states have adopted the standards, and many school districts are now grappling with the task of developing curriculum and instructional materials and strategies for the classroom. Its education system is part of that greatness. But, as Manley and Hawkins point out in this book, the measure of our greatness is changing because the world is changing. Educators have a part to play: School leaders and teachers must adapt to the new standards or fade away. The authors clearly argue why we must choose the former. They hit many topics, beginning with what the CCSS are and why they are important. They show us why we must give our children the tools to excel by elevating and transforming what we consider as the high standards of today into the basic standards of tomorrow. Manley and Hawkins provide a model for implementing the standards. I particularly appreciate their approach of using inquiry to promote dialogue.

Throughout the process, they remain mindful of what may already exist in each school district so as not to recreate the wheel. They also provide valuable data and target specific grades [Page xiii]and subject matters as they focus on common core implementation and its impact on curriculum and school management and culture. The authors acknowledge the current attacks on public education, and I agree with their point that vilifying teachers and administrators is neither the answer nor likely to facilitate change. Yes, budgets are tight. Yes, funding is limited. Tenure, performance measures, and benefit packages are key issues in the new millennium, along with student performance. But, there is one fact that is consistently ignored: Scores on the National Assessment of Educational Progress for fourth and eighth grade reading and math are the highest they have ever been. Graduation rates are the highest they have ever been, while the dropout rate is the lowest. College enrollment is at an all-time high, while high school courses are the most rigorous ever. Yet, are we satisfied with average performance? Can American schools raise student learning to competitive world standards? We are the best that we have ever been, but we are not as good as we want to be, particularly when it comes to the education of our African American and Latino students that comprise the bulk of the population in the dropout factories of America. We write as proponents of CCSS who recognize many of the limitations of a common core, not the least of which is that the common core is the lowest common level of performance to which teachers and school leaders should aspire. The purpose of the CCSS and their inherent strengths and weaknesses need discussion and debate. Those who will implement the CCSS must understand their strengths and weaknesses. We recognize that teachers, especially new and aspiring teachers, need to have a rationale and a purpose for their work with students in the CCSS. If teachers are to innovate and adapt to the learners in their classes, they must deeply understand the purpose of the common core. We provide school leaders with a practical guide to implement the CCSS. We write in a way so that teachers and school leaders can see clearly how they must work together to implement the common core standards and prepare students to function beyond the limits of the common core standards. In our effort to share a rationale and vision for the CCSS, we first help school leaders and teachers to understand why America needs common core standards and more rigorous curricula and how it is possible to have almost all of our students prepared to compete in a global economy. We distinguish common core standards from local curriculum and performance expectations. In our design for more effective schools, we see the CCSS as the framework for teacher and school leader development, innovation, and continuous improvement. We infuse into the discussion science and social studies curricular designs and efforts by teachers to meet the writing and comprehension expectations that high-performing nations achieve with many of their students. We discuss challenges that school leaders and teachers face as they try to make the CCSS work in their schools. In this effort, we focus on practical methods that teachers who employ formative assessments use to guide instruction and have almost all of their students achieve mastery of their lessons. In addition, we discuss the leadership challenge to all educators, and we offer practical pathways to success. Diversity of ethnicity, wealth, languages, schools, and culture pose exceptional challenges in the United States. We provide a winning view of diversity and multicultural issues in our schools. We show how teachers and school leaders can experience diversity as a strength and resource within their schools. We try to show how multiculturalism can become a barrier or a resource for exceptional learning in our schools. Finally, we provide a tried-and-true method to improve a school in the detailed outline that we share about joint intervention teams JITs. We give school boards, principals, teachers, and parents a blueprint to construct their own self-renewing schools. We show them how to collaborate and discover their own pathways for children to explore and to master skills for future productive citizenship. We offer liberating principles that take school leaders and teachers beyond the common core standards, and we show them the mental models necessary for freedom and the pursuit of happiness far beyond the limits of public education policy. The simplistic legislative acts that federal and state agencies initiate to monitor schools and that state governments provide to test students and evaluate teachers only matter if we permit them to restrict our performance in our schools. We want all educators to view the CCSS and state measurements of student achievements as springboards from which they launch their gymnastic gyrations into a mastery ballet of student and teacher synchronized learning. We believe that our book can enable school leaders and teachers to collaborate in new ways. We believe that educators who adopt our approach to the CCSS will see themselves

as the true innovators and the guiding hands that set children free to be lifelong learners. We have learned from every one of them. Their thirst for continuous learning and efforts to improve their knowledge and practice are nothing short of inspirational. The people we admire the most know that test prep is not a curriculum and that failure does not motivate children. They learn from error when errors are pathways to learning. Our deepest thanks and gratitude to Arnis Burvikovs, Kimberly Greenberg, and Pam Schroeder of Corwin for their unfailing support, expertise, and guidance through the process of bringing this book to fruition. We wish to express our sincere appreciation to our colleague, Dan Domenech, Executive Director of the American Association of School Administrators, for his wisdom, advice, and the insights he offers in the Foreword to this book.

Chapter 2 : Core exercises: Why you should strengthen your core muscles - Mayo Clinic

About the Author: Anna Schattauer PaillÃ© joined Student Achievement Partners in as a member of the Assessment Team. Anna supports the daily work of the Assessment Team, contributing to various projects to support the development of Common Core-aligned assessment.

Not so with Storyworks. We use every piece of this magazine, cover to cover, and we love the online component as well. They always laugh when I ask them to look at a photo of someone whose face is scrunched into a scowl and infer how they are feeling. My favorite thing about this resource is how it gradually releases several different types of inferring to my students. They start by looking at an image and making inferences. We do this work aloud, and students have miniature debates trying to defend their inferences when they disagree. This is an excellent precursor to using text evidence to back up their thinking. The workbook then moves to some guided practice, where I help my students make inferences about setting, plot, and characters. Finally, they get an opportunity to do this work on their own with an engaging text that is included right in the book! The article has opportunities for students to practice this skill with fiction, nonfiction, and poetry. It is not only diverse in the types of texts included, it also varies the types of responses students have to do. On some pages, they are asked to write an answer that may vary in length from a few words to a full page. Other pages include multiple-choice questions, and even though they all require the students to infer, they worded the questions in a variety of ways. This is great practice for standardized tests! The activities in the workout can also easily be used in small groups or in a whole-group discussion, which I have chosen to do several times. It is so much easier to push my students through a tough skill when they are working with a text that they actually want to read. As with the other resources in the Storyworks line, the team has also crafted an excellent teaching guide to accompany the Core Skills Workout. I am in Texas, and they even included a state-specific teaching guide for my state. Storyworks has been such a breath of fresh air for me, and this supplemental resource is no different. Click here to check it out! Share with us in the comments section below.

Chapter 3 : Core (manufacturing) - Wikipedia

Engage, challenge, and inspire students with work that matters Transformational Literacy, written by a team from EL Education, helps teachers leverage the Common Core instructional shifts--building knowledge through content-rich nonfiction, reading for and writing with evidence, and regular practice with complex text--to engage students in work that matters.

Forget crunches, hanging leg raises, and the Shake Weight. But first we need to look at the function of the core. Despite what late night TV promotions will tell you, the core is made up of so many muscles that listing them all, as well as their functions, would take up most of my word count. The core is not just the four major muscles making up the abdominal group – rectus abdominus, internal and external oblique, and transverse abdominus. To understand what constitutes a muscle of the core I have one simple test – does it help me to keep my spine in neutral? Core stabilization equals no movement of the spine. So imagine I hold a heavy weight, like a 40kg kettlebell, in my right hand. Naturally my body will want to dip towards the right as the weight pulls me down. Opposing that force will be the muscle of my trunk on the opposite side, as well as my legs and hips, and even those in my lower legs and feet. There is no such thing as an exercise that works only one muscle group – in this case my entire body will work together to hold me in neutral. One of the biggest things currently emerging in the fitness world is the importance of the primitive patterns – rolling and crawling. These developmental patterns have been popularized by greats such as Gray Cook in the FMS and the practice is starting to show very positive effects, from increased function in other activities to reducing ADHD. Why is crawling so important? Crawling sets up an X pattern that is the basis for many athletic movements. Notice when you walk or run that your arm moves in opposition to your leg? If you rotate that action ninety-degrees you end up with crawling. In the prone position you are able to feel the muscles that should be stabilizing the spine because they have the extra pressure of gravity acting on them. This is often why an exercise like the plank is a good starting position to teach people abdominal stability. However, the plank quickly becomes too easy and we must seek new and more challenging ways to stabilize the spine. When you are able to perform exercises such as these easily, it is time to progress to moving plank exercises such as crawling. These low-speed, low-load activities allow you to feel what is going on in your body and make sure your movement is correct. Hips should remain flat without rocking from side to side, knees should come straight forward not out to the side, and spine should stay flat throughout. While there are many crawling options contained within Primal Move , at some point you need to add load and further challenge the body. This is where single kettlebell training comes in. In fact, I believe heavy, single kettlebell training is the single best core stability training you can do once the easy progressions have been mastered. The role of the kettlebell in single bell training is simple – to pull you out of neutral spine. Your job is to prevent it. Imagine a goblet squat. In this position there are a number of things happening on a core stability level. My abdominals are working to prevent me collapsing into lumbar flexion, while at the same time the muscles of my back are working to keep my thoracic spine extended and neutral. The muscles of my thighs and hips are struggling to prevent any kind of valgus collapse, which would probably lead to me going into spinal flexion. Finally the muscles of the feet are working to provide a solid arch, which gives me a strong first point of contact with the ground. Now take all that and multiply it by holding a kettlebell in one hand in the rack. Not only do you have the same issues being faced, you now have to counter both rotational forces as well as higher levels of force on the side bearing the bell. This can be expanded even more when you use the quick lifts, such as the one-hand swing. At the same time the body is being forced to learn how to stabilize the spine quickly time and time again. An exercise like the kettlebell clean is ideal for teaching a rugby player how to take and shrug off tackles. As a heavy bell impacts the lifter they are forced to cope with the force of the bell generated from the swing as well as keep their spine neutral throughout the whole process. One of the biggest issues people have with heavy cleans is that one hip tends to lag behind the other. If you stamp down hard on the leg that is opposite the bell-bearing side you are creating that X that our initial crawling movement was helping you to prepare. In the FMS system they have a saying that the bottom four fix the top three in reference to

which exercises to pick first when seeking to perform correctives. The bottom four consists of shoulder and hip mobility and trunk stability. Crawling is linear stability and anti-rotation and so is heavy, single kettlebell work.

Chapter 4 : What is core exercise? | Types Of Exercise Programs - Sharecare

Six-pack, eight-pack (genetic freaks), washboard, whatever you want to call it, your core is the centerpiece for any muscular physique. It is the eye-catcher for the opposite sex. A muscular and well-defined core shows both strength and health. Both guys and gals strive to have a strong, toned.

JC Pinzon Fitness Core exercises include movements that activate a group of muscles called the core. These muscles work as a group to help stabilize and control the spine. The muscles are located on the midsection of the trunk and are mostly deep muscles. Activation of these muscles is possible by recruiting the right fibers in the movement. Physical Therapists and Pilates instructors are trained on how to teach to activate these important muscles. Training the core muscles will prevent injuries and teach you good mechanics when either working or exercising properly. One of the most used core exercises is the plank. It is an isometric contraction but the muscles are working. Try regular and side planks to increase your core first before graduating to harder core exercises. The main core muscles include the transverse abdominus, obliques and erector spinae, but there are many other muscles that can be considered as core. Core exercises focus on the abdomen, the lower abdomen and hips, the obliques, stabilizing muscles, the spine and the back muscles, as well as the butt. Core exercises train these muscles to work together properly to maintain proper balance, agility, posture and movement to help the body move efficiently as well as preventing injury. Some examples of core exercises are the plank hold, side plank, floor bridge, bicycle crunches, reach throughs, push ups, back extensions and a number other exercises that focus on the trunk of the body. National Academy of Sports Medicine Core exercises are any exercises that challenge the muscles that make up the torso, spine and pelvis, the area of the body that must stabilize the spinal column and hips and pelvic region, which are your base of support for all movements and actions. Nearly any exercise in which the body is not being supported is and can be a core exercise. For example, instead of doing a bench press on a bench or a machine, performing the same movement on a physioball requires you to activate muscles in the stomach, spinal column, hips, and pelvis to balance and stabilize the body. A push up is another example of a core exercise because the back, and abdominal muscles must contract to keep the spine straight as you perform the push-up. The point of core exercises is to train the many large and small muscles that help control and stabilize the spinal column and pelvis to build endurance and strength and be better able to control the spine and pelvis when forces are applied to it during daily activities and physical activities. Core exercises can and should be incorporated into every workout you perform each time you exercise. This can be accomplished by performing as many exercises as possible while having your spine and pelvis unsupported by a bench or seat. This will require the core muscles to engage to stabilize the body. A core exercise is an exercise that targets any one of the 29 muscles found in the core. The core is made up of two systems: When performing core exercises you want to stabilize before attempting movement. Stabilization muscles include internal and external obliques, lumbar, and pelvic floor muscles. An example of a stabilization exercise is the supine bicycle. Movement muscles include the erector spinae lower back center above glutes, hip adductors and abductors inner and outer thigh. An example of a movement exercise would be the squat. Barb MacGillivray, NASM Elite Trainer Fitness Core exercises are about more than just strengthening your abdominal muscles; they also strengthen your hips, back and all muscles in the midsection of the body. The core is your center of gravity and where all body movements begin. A strong core is important for posture and will also help you properly perform all functional activities in your daily life. Having a strong core has also been shown to help alleviate lower back pain. If you are new to core exercise, you should start with Core Stabilization exercises. Example Core Stabilization exercises include: You can work up to performing repetitions of each exercise sets. You should perform Stabilization exercises for at least four weeks before moving on to more advanced core exercises. Examples of more advanced core exercises include: You can perform repetitions of each exercise sets. Finally, as you get stronger you can then progress to more explosive core movements also known as Power Core Exercises. You will use a medicine ball to perform these exercises. Perform repetitions sets. Your core is composed of abs, back, pelvis floor and hips. A strong core supports good posture, proper alignment and

increases stability. A strong core can help prevent low back pain, avoid injury and help maintain balance. If your core is weak your muscles are not working effectively and may result in injury. Exercises such as the plank, back extension, knee ups, push ups, leg raises, bicycle kicks, and a proper squat will strengthen the core muscles. While sitting, standing or driving practicing the drawing in maneuver by pulling your navel in towards the spine and hold for ten seconds and release. This exercise works the transverse abdominus and will increase the stability of the lower back and can be done anytime throughout the day. Within this area we have groups of muscles which help to stabilize the spine during movement, as well as muscles which help to produce such movement. The common misconception is that in order to work the core one must perform numerous crunches, leg lifts, cable rotations etc. But, in actuality, there is much more to working the core than strictly focusing on the muscles which everyone wants to see while they are at the beach. The deep muscles, the ones we cannot see are the most important component of the core. This will help engage the stabilizers of the core as well assist in relaxation due to the breathing patterns. From here, work to eventually perform the push up. Another key factor in core exercises is to develop an integrated form of training them. Then possibly progress to performing traditional core exercises, such as a crunch, reverse crunch or possibly even a back extension. Again, these would need to be performed for 4 to 6 weeks and then another progression can be made for the core region. The vast majority of people think core exercise is simply ab exercises, this thought is incorrect. The muscles of the core are comprised of two different systems, the movement system and the stabilization system. The stabilization system is responsible for the stability of your lumbo pelvic hip complex and the movement system is responsible for the movement of the core. A weak core causes inefficient movement and can lead to injury. The stabilization system consists of these muscles: Transverse abdominus, internal oblique, lumbar multifidus, pelvic floor muscles, diaphragm and transversospinalis. The movement system muscles are the latissimus dorsi, erector spinae, iliopsoas, hamstrings, the hip adductors and hip abductors. Many people have a strong movement system and weak stabilization system, this has been shown to put pressure on the disks and compressive forces on the lumbar spine area and cause low back pain. A simple drawing in maneuver, or sucking your navel towards your spine, has been shown to increase EMG and pelvic stabilization. Some examples of stabilization core exercises are Marching, two leg floor bridge, floor prone cobra and prone iso abs. Examples of core strength exercises include ball crunches, back extension, reverse crunch, and cable rotation. Power core exercises include rotation chest pass, ball medicine ball pullover throw, and woodchop throw. Kathy Shain Fitness The core refers to the pelvis, rib cage, and spinal region. This causes a large imbalance between the inner and outer units. You then have strong prime movers pulling on a weak lumbo-pelvic-hip complex that cannot stabilize itself. A weak core can lead to pain and injury over time. For example instead of performing a chest press on a machine where your back would be supported by the back pad you could do a standing cable press. Examples of a core power exercise would be a medicine ball throw. These exercises strengthen and train your lower back, hips, abdomen and pelvis to work together for better balance and stability. Core exercises can be done anywhere, without special equipment, and in small spurts.

Chapter 5 : 5 Core Competencies of Social Work Practice - Blog

Making the common core standards work: Using professional development to build world-class schools Thousand Oaks, CA: Corwin Press doi: / Manley, Robert J. and Richard J. Hawkins. Making the Common Core Standards Work: Using Professional Development to Build World-Class Schools.

Share Kicking off the adaptation of enVisionmath 2. See the Go Math! After the Go Math! After much review and consideration, we decided to tackle enVisionmath 2. We want to ensure that educators have support in using their instructional materials in ways that are aligned to CCR standards. After reviewing the program, we decided to create a companion guide to support educators in using enVisionmath 2. In the summer of , Student Achievement Partners hosted a convening for educators who use enVisionmath 2. Educators from nine districts across the country came together to share their experiences with the program and collaborate on creating the guidance documents. Participants also included regional and national representatives from Pearson. Over the fall of , educators in seven districts across the country piloted the materials in their classrooms and provided feedback that was used to revise them and get them ready to share. The guidance documents address every topic in enVisionmath 2. In talking to users of the program, we became aware of two big ideas that would be helpful across every grade and every topic. The first two components in the table above provide background knowledge about the standards at play in the topic. The Anchor Tasks are intended to guide teachers in how to spend instructional time within a unit. They are the highest-leverage, best-aligned tasks to build student mastery and knowledge of the topic. Most Anchor Tasks are straight from enVisionmath 2. The Anchor Tasks are not meant to comprise everything that happens in the classroom in a given topic; they are designed to support decision-making for what is worth spending instructional time and class discussion on, and what additional aspects of the lesson or topic to use or skip as teachers are planning. Often, they elaborate on how the two Pro Tips apply to the specifics of that topic. For some topics, the Topic Rules of Thumb also work to strengthen coherence by reordering lessons and providing guidance on making connections between concepts explicit for students. Because so many teachers work from a backwards-planning perspective, each Topic Guidance has guidance on how to modify the Topic Assessment. For each assessment item, an action is recommended in order to improve alignment. How should I use the guidance documents? These documents were created as planning documents and can help teachers as they plan out an upcoming unit. Some of the pilot teachers used this protocol to incorporate the guidance documents into their planning process: Read the standards and progression excerpt to ground yourself in the key mathematical ideas for the topic. Solve the Anchor Tasks as your students might. Complete the Anchor Tasks to figure out where the deep mathematical conversations can happen. Come up with questions that will get your students thinking and identify the misconceptions you think they might have. Plan out your Topic. Which lessons should be skipped or combined? Read the Topic Rules of Thumb and think about how you will apply them throughout the topic. Interested in checking out the documents? They will share their experiences using the guidance documents and share ideas about how to bring the enVisionmath 2. September 7, at 5: Do you know if you will have an envision 2. I know it is considered middle school in the standards, but some elementary schools still go to 6th and would like to see the same document.

Chapter 6 : Making enVisionmath Work - Achieve the Core Aligned Materials

The School Leader's Role in Making the Common Core State Standards Work Creating Guiding Ideas to Implement the Common Core State Standards Guiding Ideas and Evidence Getting to How: Operationalizing Your Guiding Ideas Identifying the Innovation Teaching the Change The Social and Emotional Literacy Components of the Common Core State Standards.

Bridge exercise Any exercise that involves the use of your abdominal and back muscles in coordinated fashion counts as a core exercise. For example, using free weights in a manner that involves maintaining a stable trunk can train and strengthen several of your muscles, including your core muscles. You may also try several specific core exercises to stabilize and strengthen your core. Some examples of core exercises include planks, situps and fitness ball exercises. A bridge is another example of a classic core exercise. Lie on your back with your knees bent. Keep your back in a neutral position, not arched and not pressed into the floor. Avoid tilting your hips. Tighten your abdominal muscles. Raise your hips off the floor until your hips are aligned with your knees and shoulders. Hold the position for as long as you can without breaking your form. Core exercises can help tone your abs Want more-defined abdominal muscles? Core exercises are important. Although it takes aerobic activity to burn abdominal fat, core exercises can strengthen and tone the underlying muscles. Strong core muscles make it easier to do most physical activities Strong core muscles make it easier to do many activities, such as swing a golf club, get a glass from the top shelf and bend down to tie your shoes. Strong core muscles are also important for athletes, such as runners, as weak core muscles can lead to more fatigue, less endurance and injuries. Weak core muscles can also leave you susceptible to poor posture, lower back pain and muscle injuries. Strengthening core muscles may also help improve back pain. Core exercises can help you reach your fitness goals Aerobic exercise and muscular fitness are the primary elements of most fitness programs. But to have a well-rounded fitness program, consider including core exercises in the mix as well.

Chapter 7 : 8 Moves For A Crazy-Strong Core

Education Edge to "ON" Is now the right time for your school to make the move?

Fusible core injection molding Cores are used for complex injection moldings in the fusible core injection molding process. First, a core is made from a fusible alloy or low melting temperature polymer. The molding is then removed from the mold with the core still in it. Finally, the core is melted or washed out of the molding in a hot bath. Binders[edit] Special binders are introduced into core sands to add strength. The oldest binder was vegetable oil , however now synthetic oil is used, in conjunction with cereal or clay. The heat causes the binder to cross-link or polymerize. While this process is simple, the dimensional accuracy is low. Depending on the type of binder it may require further baking to fully cure. When the corebox is opened and the core removed, the uncured sand inside the core is dumped out to be reused. This practice can also be observed in some cold-box coremaking practices, though cold box shell-core making is much less common. In a similar vein, the cold-box process uses a binder that is hardened through the use of special gases. The binder coated sand is packed into a core box and then sealed so that a curing gas can be introduced. These gases are often toxic i. SO₂ , so special handling systems must be used. However, because high temperatures are not required the core box can be made from metal, wood, or plastic. An added benefit is that hollow core can be formed if the gas is introduced via holes in the core surface which cause only the surface of the core to harden; the remaining sand is then just dumped out to be used again. These sands do not require a gas catalyst because organic binders and a curing catalyst are mixed together in the sand which initiates the curing process. The only disadvantage with this is that after the catalyst is mixed in there is a short time to use the sand. A third way to produce room temperature cores is by shell molding. To enhance collapsibility, straw can be added to the middle of the core or a hollow core can be used. This attribute is especially important for steel casting because a large amount of shrinkage occurs. These are usually formed by using small wires to create holes from the surface of the mold to the core. When this is not feasible cinder and coke can be added to the core to increase permeability. As mentioned earlier, cores are usually supported by two core prints in the mold. However, there are situations where a core only uses one core print so other means are required to support the cantilevered end. These are usually supplied in the form of chaplets. These are small metal supports that bridge the gap between the mold surface and the core. Since the chaplets become part of the casting, the chaplets must be of the same or similar material as the metal being cast. Moreover, their design must be optimized because if they are too small they will completely melt and allow the core to move, but if they are too big then their whole surface cannot melt and fuse with the poured metal. Their use should also be minimized because they can cause casting defects or create weak spots in the casting. This is a third segment in the flask , in addition to the cope and drag. This allows the entire mold to be made from green sand and from removable patterns. The disadvantage of this is more mold-making operations are required, but it is usually advantageous when the quantities are low. However, if large quantities of casting are required, it is usually more cost effective to simply use a core.

Chapter 8 : Inferences: A Storyworks Core Skills Workout | Scholastic

Fate Core Making the Setting Work in Fate You're probably already familiar with the idea of a setting, but in short, it's everything that the characters interact with, such as people, organizations and institutions, technology, strange phenomena, and mysteries (crime, intrigue, and cosmic or historical legend).

Being a great team member. Respecting company policy and rules, and respecting others. When this happens, people understand one another, everyone does the right things for the right reasons, and this common purpose and understanding helps people build great working relationships. Values alignment helps the organization as a whole to achieve its core mission. When values are out of alignment, people work towards different goals, with different intentions, and with different outcomes. This can damage work relationships, productivity, job satisfaction, and creative potential. The most important thing that you need to do when interviewing someone is understand his or her workplace values. After all, you can train people to cover skills gaps, and you can help people gain experience. Core Values in the Workplace Before you learn how to identify the values of others, make sure that you understand your own values. For example, does meeting a project deadline take priority over delivering exceptional work? Your goal in identifying these is to raise awareness and encourage good behavior and habits. Start by talking with your most respected team members about the workplace values that they feel are important. Ask them to brainstorm the values that they believe are most prevalent among good performers, and list these on a whiteboard or flip chart for them to see. Once they have come up with their ideas, work together to cut the list down to the five most important workplace values. Use the Modified Borda Count if you have any problems reaching consensus. Next, discuss how people demonstrate these values every day. How do they make these values come to life? And how can you encourage more of these behaviors? You can also talk to team members one-on-one to get a better idea of their workplace values, coach them to explore beliefs and values, or simply study their behavior. Also, check your employee handbook or rule book. Organizations often list their values in these documents. Pay a lot of attention to these. You can also identify organizational values by looking at how people work within the company, and by looking at the actions that the organization has taken over the last few years. There are several ways to do this. For instance, imagine that you want to find a team member who, among other values, is highly tolerant of other cultures. You could ask questions like these: How did you go about identifying and understanding their points of view? How did you adapt your own working style to work more effectively with these people? What was the outcome? If so, how did you overcome these differences? See our article on structuring interview questions.

Chapter 9 : Forget Crunches: How to Actually Strengthen Your Core | Breaking Muscle

The 21 Best Bodyweight Exercises for a Strong Core. Try the minute workout (at the bottom of the page) to train your upper and lower abs and obliques, and work on deep core strength, or mix.